

श्री श्रीगोपाल व्यास: धन्यवाद, उपसभापति जी, आपने मुझे इस महत्वपूर्ण विधेयक पर बोलने का अवसर दिया। मैं स्वयं ही इस विषय पर प्रारंभ में ही बोलने वाला था कि हमारे श्रेष्ठ नेताओं ने इसे प्रवर समिति को भेजने के बारे में कहा था, उस पर क्या हुआ? परंतु मेरे बोलने से पहले ही सारे नेतागण खड़े हो गए और उन्होंने इस बात की मांग की।...(व्यवधान)...

मान्यवर, इसे प्रवर समिति को भेजे जाने के पक्ष में मैं भी था क्योंकि इसमें बहुत जटिलताएं और बारीकियां हैं। हालांकि यह लोक सभा से पास हुआ, लेकिन उन पर विचार करना आवश्यक था। अब जब कि यह चर्चा शुरू हुई है, मुझे खुशी है, परंतु मुझे आश्चर्य है कि संसद में पारित होने के पहले ही सरकार ने इसके बारे में अधिसूचना क्यों जारी की। यद्यपि कभी-कभी यह होता रहा है, लेकिन फिर भी यह सोचने का विषय है कि संसद का सत्र नजदीक होते हुए भी अधिसूचना जारी कर अंतरिम अकादमी चालू करने के लिए इस विधेयक को लाया गया। यह मेरी समझ से बाहर है।

मान्यवर, मेरा ध्यान इस विषय पर इसलिए गया क्योंकि मैं विज्ञान से जुड़ा हूँ और इंजीनियर रहा हूँ, इसलिए मेरी इस बारे में रुचि हुई है। हम सभी जानते हैं कि हम हजारों वर्षों से सारी दुनिया को विज्ञान के क्षेत्र में विभिन्न प्रकार से योगदान देते आए हैं। यहां तक कि "शून्य" भी दुनिया को मालूम नहीं था, "दशमलव" भी मालूम नहीं था, उन को "पाई" की value भी नहीं मालूम थी, खगोल शास्त्र की अनेक बातें विश्व को नहीं मालूम थीं। अगर हमने दशमलव व शून्य दुनिया को नहीं दिया होता तो वह एक "वी" बनाकर और पचासों लाइंस खींचकर संख्याओं को गिन रहे होते। मान्यवर, जिन लोगों की इस विषय में रुचि है, उनको मालूम है कि गणित का हमारा ज्ञान अरब देशों से होकर यूरोप में गया। इसलिए कई लोग उसे अरेबियन गणित कहते हैं। लीलावती का बीजगणित यूरोप में सात सौ वर्षों तक पाठ्य पुस्तक के रूप में पढ़ाया जाता था। हमारे आर्यभट्ट जैसे अनेक वैज्ञानिक हैं जिनके बारे में सारी दुनिया सुनती आयी है। परंतु हमारे सर सी.वी. रमन ने जो पुरस्कार प्राप्त किया था, उसके बाद हम अनुसंधान में कितने पिछड़ गए हैं, यह इसी बात से साबित होता है कि "रमन स्कैनर" का शोध किसी और ने किया। सर रमन हमारे यहां हुए, लेकिन रमन स्कैनर का शोध दुनिया में कहीं और हुआ। यही इस बात को बताता है कि विज्ञान में अनुसंधान की ओर हमारी प्रवृत्ति कितनी कम हुई है। मान्यवर, मैंने एक रिपोर्ट पढ़ी है जिसके अनुसार कहा जाता है कि सरकारी शोध संस्थानों की मौजूदगी के बावजूद भारत के विश्वविद्यालयों में वैज्ञानिक शोधक परंपरागत केन्द्र रहे हैं। लेकिन इनकी दिनों-दिन बढ़ती संख्या के बावजूद, पैसे की कमी और कई अन्य कारणों से, हमारे कुछ विश्वविद्यालयों को छोड़कर बाकी सब शोधक मामलों में पिछड़ते जा रहे हैं। दुनिया के ज्यादातर विकसित देश वैज्ञानिक क्षेत्र में शोध को बढ़ावा देने के लिए 30 प्रतिशत तक खर्च करते हैं और हम केवल 6 प्रतिशत पर ही अटके हुए हैं। आज देश में स्थिति यह हो गई है कि हमारे जो वैज्ञानिक हैं, जो उच्च-स्तर पर शोध भी करते हैं, उन्हें जल्दी नौकरी मिले, ज्यादा पैसा मिले, इसके लिए वे अपने देश से दूसरे देशों में चले जा रहे हैं और शोध से किनारा करने लगे हैं।

उपसभापति जी, जब मैंने इसके उद्देश्य पढ़े, तब मुझे समझ में आया कि इस अकेडमी के द्वारा हम ऐसे क्षेत्रों में शोध को बढ़ावा देना चाहते हैं, जो सीएसआईआर में, या दूसरे जो हमारे वैज्ञानिक परिषद हैं, उनमें नहीं हैं। अच्छा होता, मंत्री जी, कि इन उद्देश्यों में उन विषयों का जिक्र होता। इसमें यह इंटर-डिसिप्लिनरि सब्जेक्ट का कोई स्पष्ट उल्लेख नहीं है। कैमिकल-फिजिक्स होगा, या फिजिकल-कैमिस्ट्री होगा, या ट्रिगनोमेट्रिकल-मैथमेटिक्स होगा, या मैथमेटिकल-ट्रिगनोमेटरी होगा? भगवान जाने इंटर डिस्प्लिनरि से क्या मतलब होता है? यह कहीं पर स्पष्ट नहीं किया गया है। अच्छा होता कि उन विषयों के बारे कुछ जानकारी आप देते, जिससे समझने में सुविधा होती, अन्यथा ऐसा लगता है कि हमारी जो परिषद है, वैज्ञानिक अनुसंधान परिषद, उसी के आधार पर इस अकेडमी को बनाने का विचार हुआ है। केवल उसी के आधार पर, उसी की संपदा पर, उसी के वैज्ञानिकों के बल पर हम एक नई अकेडमी बनाने जा रहे हैं। मुझे समझ में नहीं आया कि केवल अकेडमी बना देने से कैसे छात्रों की संख्या बढ़ जाएगी? इसमें कहा गया है कि पी.एचडी. आजकल बहुत कम हो रहे हैं, इनकी संख्या बढ़ानी है। जब मैं इसे देख रहा था, तो मेरे मन में अनेक प्रश्न उठे। मैंने स्थाई समिति की रिपोर्ट भी पढ़ी, मैं यहां सदन में अपने डा. स्वामीनाथन जी के प्रति बहुत कृतज्ञता व्यक्त करता हूँ कि उन्होंने हमारे राष्ट्र को ठीक रास्ते पर चलने को प्रेरित किया है। उनका बहुत बड़ा योगदान स्थाई समिति की रिपोर्ट में रहा, परन्तु मेरे मन में एक प्रश्न खड़ा हुआ कि क्या सीएसआईआर से हमारी पर्याप्त चर्चा हुई है? यह जो चर्चा हुई है, वह उनके एडमिनिस्ट्रेटिव स्टाफ से हुई है या उनके वैज्ञानिकों से हुई है? मुझे यह पढ़ने पर समझ में नहीं आया। इसमें यह भी कहा गया है कि हमारे यहां जो पी.एचडी. लोगों की शॉर्टेज है, उसको हम दूर करेंगे। इसमें ऐसे कई विपरीत वक्तव्य हैं, जिनके कारण मुझे ऐसा लगा है कि वास्तव में इसे सेलेक्ट कमेटी को जाना चाहिए। उदाहरण के लिए आप कह रहे हैं कि पी.एचडी. की शॉर्टेज है और वार्षिक रिपोर्ट 2010-11 के पृष्ठ 79 पर लिखा है कि विगत तीन वर्षों के दौरान विज्ञान और इंजीनियरिंग में भारत के पी.एचडी. निष्पादनों में महत्वपूर्ण वृद्धि की सूचना मिली है। अब क्या माना जाए? आप कारणों में कह रहे हैं कि पी.एचडी. की संख्या कम हो रही है और आपकी वार्षिक रिपोर्ट 2010-11 में पृष्ठ 79 पर यह लिखा है। अब मुझे समय में नहीं आ रहा है, स्थिति क्या है? आपने स्वयं एक इंस्पायर यह नया शुरु किया है, इसलिए एसआईआरसी कहता है कि विज्ञान और इंजीनियरिंग के नए और अंतर्विषयी क्षेत्रों के अनुसंधान और विकास को बढ़ावा देने के लिए अपने कार्यक्रम को जारी रखेगा। इन सब बातों के कारण मन में एक प्रश्न खड़ा हो गया कि अकेडमी की जरूरत क्या है? अभी तो विश्वविद्यालयों से पी.एचडी. मिलते हैं, क्या सरकार इन सारे विश्वविद्यालयों के ऊपर क्या कोई एक और नियंत्रण करने के लिए यह अकेडमी बनाना चाहती है? अकेडमी नाम के पीछे जब मैं शोध करने लगा, तो मुझे पता लगा कि इसकी पृष्ठभूमि क्या है? मैं पढ़ रहा हूँ, उपसभापति जी, अगर आपकी अनुमति हो तो।

श्री उपसभापति: पढ़िए, पढ़िए।

4.00 PM

श्री श्रीगोपाल व्यास: महोदय, इसमें लिखा है - समिति को यह भी बताया गया कि चीन में पी.एचडी. धारकों की संख्या में कायाकल्प मुख्यतः चाइनीज एकेडमी ऑफ साइंस के कारण हुआ, जिसकी 92 राष्ट्रीय प्रयोगशालाएं हैं और अपने गुप में यह सीएसआईआर के समान है, जिसकी 37 प्रयोगशालाएं हैं। Chinese Academy of Sciences मुख्यतः scientific & academic कार्यक्रमलाप संचालित करती है और University of Science & Technology of China के माध्यम से भारी संख्या में Ph.D धारक तैयार किए गए हैं।

यदि दुनिया में कोई Academy अपने नाम से Ph.D धारकों की संख्या बढ़ाती है, इसीलिए हम भी इसका नाम Academy रखना चाहते हैं, तो यह मेरी समझ के बाहर है। इन्हीं कारणों से मुझे लगा कि इस विषय को जरूर विशेषज्ञ समिति को सौंपा जाना चाहिए। इस पर डिस्कशन के लिए अनेक विशेषज्ञों को बुलाया गया था, लेकिन जब स्थायी समिति के सामने हमारी आधारभूत संस्था, CSIR के सचिव को बुलाया गया, तो उन्होंने जो कहा, वह पढ़ने लायक है। इससे पता लगता है कि उन्हें भी शंका थी कि यह सब करना संभव होगा या नहीं। सचिव महोदय ने जो कहा, उसे मैं पढ़ना चाहता हूं। सचिव महोदय ने यह कहा कि इतनी प्रकार की अलग-अलग राष्ट्रीय योजनाएं हैं, उदाहरण के लिए डिफेंस है। डिफेंस अपने स्तर पर बहुत सारी डिग्रियां और Ph.D देने का काम करती है। डिफेंस के ऐसे अनेक संस्थान हैं, जो अपने आप बहुत से अनुसंधान करते हैं और डिग्रियां देते हैं ...**(व्यवधान)**... मुझे दुःख है कि मंत्री महोदय का ध्यान इधर नहीं है।

श्री उपसभापति: तरुण जी, आपके साथी मेंबर object कर रहे हैं, आप मंत्री जी से बात कर रहे हैं और वे object कर रहे हैं।

श्री श्रीगोपाल व्यास: मंत्री जी, मैं आपका ध्यान इस और आकर्षित कर रहा था कि जब सचिव महोदय को स्थायी समिति के सामने बुलाया गया, तो उन्होंने बहुत प्रकार की शंकाएं प्रकट की थीं, क्योंकि हमारे अनेक उद्यम हैं, जैसे रक्षा एक महत्वपूर्ण उद्यम है, वे अपने स्तर पर ही Ph.D देने का प्रबंध कर रहे हैं। जब ऐसे अनेक संस्थान Ph.D देने का प्रबंध कर रहे हैं, जब उनके विश्वविद्यालय Ph.D दे रहे हैं, तो मन में यह प्रश्न खड़ा होना स्वभाविक था कि वर्तमान में जो वैज्ञानिक परिषद है, क्या हम उसके संसाधनों का प्रयोग करके, केवल उसको Academy का नाम देंगे और उसका उपयोग डिग्री देने के लिए करेंगे तथा उसको राष्ट्रीय महत्व की संस्था घोषित करेंगे, क्या उसका उद्देश्य केवल यही है? जब यह सवाल पूछा गया कि क्या वास्तव में अधिक Ph.D निकालने का उद्देश्य है, तो उत्तर में कहा गया कि हम बाहर से अधिक जनशक्ति ले आएंगे। जब बाहर से ही लाना है, तो अपने यहां Ph.D देने में क्या तकलीफ है? मेरा सुझाव है कि हमारे जो विश्वविद्यालय हैं, उनके संसाधन बढ़ाए जाने चाहिए। जो लोग

विज्ञान के क्षेत्र में प्रगति करना चाहते हैं, जो लोग देश के बाहर जा रहे हैं, उनको यहीं रोककर, अधिक संसाधन देकर, शोध को बढ़ावा देना चाहिए। केवल नाम बदलने से काम नहीं होगा। इसलिए जो काम होना चाहिए, उसके लिए आप अधिक संसाधन दें, वैज्ञानिकों को प्रोत्साहन दें, पुरस्कार दें और जो शोध करने वाले लोग हैं, उनको यहां रोकना तभी संभव होगा, जब हम उनको इस प्रकार का आश्वासन देंगे कि तुम इस क्षेत्र में शोध करो, हम तुम्हारे लिए सारे संसाधन जुटाएंगे।

उपसभापति जी, आप मुझे क्षमा करेंगे, मैं विज्ञान का छात्र हूं, मैं ज्यादा राजनीति नहीं जानता हूं। जब मैंने इस बिल को पढ़ा, तो देखा कि इसका विस्तार जम्मू-कश्मीर के सिवाय संपूर्ण भारत में होगा। ठीक है, वहां धारा 370 लागू है, कहते हैं, उसके कारण इन सब समस्याओं का निर्माण हो रहा है, लेकिन मैं पूछना चाहता हूं कि विज्ञान के क्षेत्र में हम जम्मू-कश्मीर को क्यों छोड़ना चाहते हैं? यह बात मेरी समझ से परे है। आपने वहां एक परामर्श केन्द्र खोला है। आप वार्षिक रिपोर्ट के पृष्ठ 10 पर देखिए, वहां लिखा है कि हम वहां पर एक परामर्शी विकास केन्द्र खोलेंगे, फिर जम्मू-कश्मीर को हम इस विधेयक से बाहर क्यों रख रहे हैं? ...**(व्यवधान)**...

मेरी राय यह है कि विज्ञान और तकनीकी के क्षेत्र में ऐसे सारे बंधनों को मिटाया जाना चाहिए और धारा 370 इस देश के लिए बड़ी समस्या बन गई है। कम से कम विज्ञान के मामले में हम जम्मू-कश्मीर को अछूता न छोड़ें। अब मैं आपके विधेयक पर आ रहा हूं। आपके विधेयक में अनुच्छेद 4 में लिखा है कि "अंकों या ग्रेडों पर अनन्य रूप से ध्यान देने के बजाय, उन्नत विज्ञान और प्रौद्योगिकी में शिक्षण और छात्रवृत्ति के लिए परिवेश सृजित करना।" इसका अर्थ यह है कि आप मानते हैं कि आज यह परिवेश नहीं है, इसलिए उस परिवेश की आवश्यकता आपने अनुभव की है। सृजन करने के लिए यहां पर्याप्त गुंजाइश है, बाहर से कोई लोग बुलाने की जरूरत नहीं है, ऐसा मेरा मत है। महोदय, अभी रिजर्वेशन के बारे में बात चल रही थी। हमारे बंधुओं की सोच इसलिए ठीक थी कि इसमें जो लिखा है, वह यह लिखा है, "इस धारा की किसी भी बात के बारे में यह नहीं समझा जाएगा कि वह अकादमी को महिलाओं, निःशक्तताग्रस्त व्यक्तियों या समाज के कमजोर वर्गों के व्यक्तियों और विशेष रूप से अनुसूचित जातियों, अनुसूचित जनजातियों और नागरिकों के अन्य सामाजिक और शैक्षिक रूप से पिछड़े व्यक्तियों के नियोजन या प्रवेश के लिए विशेष उपबंध करने से निवारित करती है।" आपने यह नहीं लिख कि हम प्रावधान करते हैं। यदि यह लिखा जाता कि हम प्रावधान करते हैं तो समस्या खड़ी नहीं होती। मैं यह मानता हूं, अनुभव से जानता हूं। हमारे यहां अनेक बंधु हैं, हम अनेक ऐसे संगठनों से जुड़े हैं, जहां पर तथाकथित अनुसूचित जाति और जनजाति के लोग विज्ञान तथा अनुसंधान कार्य क्षेत्र में बहुत आगे हैं। इस मान्यता को हटाना पड़ेगा कि वे बंधु हमारे इस क्षेत्र में आगे नहीं बढ़ सकते हैं। वास्तविकता यह है कि हम उनके लिए पर्याप्त अवसर दें, उनको पर्याप्त संसाधन जुटाएं। यदि ऐसा किया गया तो मुझे विश्वास है कि सारे बंधु विज्ञान और तकनीक के क्षेत्र में बहुत आगे बढ़ेंगे। महोदय, मैं देख रहा था कि इसमें लिखा है कि सरकार से कोई अधिक पैसा हम नहीं लेगे। जो फाइनंशियल ज्ञापन कहलाता है, उसमें लिखा है कि 15

करोड़ रुपए हम अनुसंधान परिषद को दे देंगे। आखिर वह परिषद तो सरकार की है। आप यदि 15 करोड़ उनको दे रहे हैं तो आप यह कैसे कह सकते हैं कि सरकार से किसी सहायता की जरूरत नहीं है? आपने यह भी लिखा है कि जो छात्रों से फीस मिलेगी, जो अर्जन उसके द्वारा होगा, उसका उपयोग हम करेंगे। तब यह कहने की कोई जरूरत नहीं है कि हम सरकार से कोई पैसा नहीं लेंगे। महोदय, मैं अधिक समय नहीं लूंगा। मैं केवल इतना ही कहना चाहता हूं कि इसमें बहुत सारी जटिलताएं हैं। यह योग्य होता है कि इसे किसी न किसी प्रवर समिति को भेजा जाता। उसका जो गठन है - कौन, किसका निदेशक बनेगा - उस मामले में मैं अभी नहीं जा रहा हूं। बहुत बार ऐसा होता है कि बहुत से लोग, जिनको कहीं पर काम नहीं है, कोई न कोई माध्यम ढूंढकर, सरकारी माध्यम ढूंढकर कोई न कोई पद प्राप्त करने की कोशिश करते हैं। ऐसा नहीं होना चाहिए। जिसकी योग्यता है, जो उसके लिए क्षमता रखता है, उसको आगे बढ़ने देना चाहिए। मैं समझता हूं कि ऐसा आपका उद्देश्य नहीं होगा। मैं आशा करता हूं कि मेरी कही हुई बातों पर आप अवश्य ध्यान देंगे। परिषद का केवलमात्र नाम बदल देने से काम नहीं होगा, केवल अकादमी, चूंकि चाइना मैं है, इतना कह देने से हमारी अकादमी सक्षम नहीं होगी। हमारी संस्थाओं को योग्य प्रकार से बलवती बनाने के लिए सारे संसाधन देने चाहिए। महोदय, लोग बाहर इसलिए जा रहे हैं क्योंकि उनको यहां रिसर्च करने की सुविधा और साधन उपलब्ध नहीं हैं। यदि आप इतना करेंगे तो मैं समझता हूं कि यह कदम, चूंकि विज्ञान और अनुसंधान को आगे बढ़ाने वाला है, इसलिए स्वागत्य जरूर है, परन्तु केवल इसका नाम बदल देने से काम नहीं चलेगा। जो संस्था पहले से है, उसको और बलवती करने के लिए केलकर समिति ने कुछ वर्ष पहले रिपोर्ट दी थी। अभी समय की कमी है, इसलिए मैं उसको नहीं पढ़ रहा हूं। उन्होंने सिफारिश की थी कि आप इस प्रकार की अनुसंधान परिषद को सब प्रकार के साधन दीजिए। वह साधन नहीं दिए गए इसलिए ये समस्याएं खड़ी हुई हैं। इतना कहकर मैं आपसे केवल एक बात कहना चाहता हूं, जो किसी कवि ने कही है:

व्यक्ति-व्यक्ति की सृजन शक्ति की अभिव्यक्ति कर,

मातृ चरणों पर चढ़ा दो।

भारत का भाग्य पड़ा भू पर,

गौरी शंकर की ओर बढ़ा दो।

PROF. P.J. KURIEN (Kerala): Mr Deputy Chairman, Sir, thank you very much. I rise to support the Academy of Scientific and Innovative Research Bill, 2011, of course, in the amended form. There was an apprehension whether reservation was included; and that controversy has been resolved. The hon. Minister was kind enough to explain very clearly that the reservation will be applicable to this institute. I thank the Minister for that.

Sir, as the Minister has said, this institute will be of national importance; and I find it a very important Bill because our country is lacking in research. My predecessor, Vyasji was saying that the

number of PhDs in our country is less and in China it is much more. Indeed China is doing much, much better than us in research especially in new, frontier areas, in emerging areas, in inter-disciplinary areas and integrated areas. In all these areas we are lacking in research. This is a hard reality. What is the adverse impact of that? It will definitely decelerate our economic development and our employment generation. If the country wants to progress the way we are progressing today, we will have to focus much more on research especially in the new and frontier areas.

Sir, there was a study by an International Business School regarding ranking in the innovation research by each country in the world. This organization is in France. It is called INSEE. They have published our rank. We need not take that institute seriously. But I take it seriously because they have done it in collaboration with the Confederation of Indian Industries; and also in collaboration with the World Intellectual Property Organization. Therefore, their study has some authenticity. We know where are ranking is. In 2011 our ranking is 62 in the world. Last year were standing at 56th rank; and year before that we were ranked at 41. that means year-after-year we are slipping down whereas China is going up and China's position is much ahead of us. We can have one satisfaction that we are ahead of SAARC countries. That is okay. When we compare ourselves with other countries we are much below in research and even in fundamental research. I admit it is only relative. That doesn't mean that there is no research in this country. We have our research. We are spending money. We have a number of laboratories. Fortunately or unfortunately other countries are moving faster, in a fast moving world. If you are static that means you are lagging behind. Static means lagging behind. If you want to keep the same pace, you have to move faster. I have no grudge against China. But I want very good relations with China. But the point is we should learn from China in this. How could they go so fast? That is what needs to be done. One of the reasons is that what we spend on research is much less. It is a paltry sum. When China is spending 1.5 of its GDP we spend less than 0.7 of the GDP. If I am wrong, the hon. Minister may correct me.

SHRI VILASRAO DESHMUKH: It is 0.8 per cent.

PROF. P. J. KURIEN: The Minister says now it is 0.8 per cent. In other countries, especially in the developed countries, a lot of research is being done by the corporate bodies. In our country the

corporate bodies get a lot of concessions from the Government, but they will not spend money on research. That is an unfortunate thing. So, China's position is better.

In the morning, during Question Hour, I had put a supplementary that China was dumping cheap and low quality goods in our country. That is a wrong perception, I am telling you. China, instead of being a cheap quality imitator of goods has become an inventor. That should be a lesson for us. What do we lack? Fundamentally, in my view, what we lack today is the basic education. See our education. We have a number of colleges, technical institutions, engineering colleges and IITs. We produce job seekers, not job creators. Our institutions should change. The whole structure should change. They should become job producers. They should produce innovators. They should produce entrepreneurs, not job seekers. How is it possible? That is possible not by one day. That is not possible by this Bill. That is possible if we have a new outlook from the very primary school level. Today, what is our education system? Students learn by heart. It is called 'mugging', cramming, and then they go on. That is not real education. Real education is problem-solving. Students should learn problem-solving; students should ask 'why'; students should question. And if, today, somebody asks 'why' and 'how', then the student will get beating from that teacher. The only place you can ask 'why' is here! We can ask why the Chairman is doing that. That is happening here. But this we did not do in schools. This habit of questioning the decision should be transferred to the schools and colleges. You know Sir Isaac Newton, the Father of Modern Science. You know what happened. One day, he was sitting on the bank of a lake. An apple fell on his head. We would have taken the apple and eaten it. But he thought, "Why should the apple come down?" Why not the apple go up? What a question, a foolish question, at that time? At that time, such a foolish question it was! But when he questioned that fundamental on an age-old theory, when he questioned that concept, the entire world changed. He is Father of Science. And he discovered the Newton's Law of Gravitation, which says that mass is nothing. Mass is only the attraction of the earth that brings the bodies down there. That has been proved too. So, this kind of education.....

SHRI D. RAJA (Tamil Nadu): He is a giving a lecture on Physics to all of us!

SHRI P. RAJEEVE: He is a Professor in Kerala.

MR. DEPUTY CHAIRMAN: That is why he is teaching us Physics!

PROF. P.J. KURIEN: Okay. ...*(Interruptions)*... My point is this. This kind of education where students can ask 'why', where students can question, we should start. Unfortunately, today, we are not having that.

Another point is, Pandit Jawaharlal Nehru said, we should develop scientific temper, scientific attitude, which is not there. Even after passing MSc, Ph.D, they are living in superstition. So, scientific temper we should develop. That is also not happening in this country. These are needed for changing the approach of our young men so that they could become real inventors, so that they could become real entrepreneurs. But this will take a long time. We cannot wait for all this. We should have some short-term measure. For that, this is the remedy which the hon. Minister has brought, a short-term measure. I am not saying that it is an answer to all our problems. But it is genuinely an attempt, an attempt to have, at least, a partial solution to the problem. What is this problem? It is done very intelligently. Number one; you don't have to spend much money. You don't have to. Without spending much money, in a cost effective manner, we have got a large pool of scientists in CSIR. He is making use of them. Secondly, there is no gestation period also. All those scientists and the infrastructure of CSIR will be used so that we could produce new Ph.Ds not only in the old known areas but in the new frontline areas, in the new emerging areas and in the new interdisciplinary areas. This is a welcome measure and an intelligent measure by which we can solve the problem, at least, for the time being. It is very cost effective. I congratulate the Minister for his efforts and for finding such a solution to our problem.

There is one more thing. We have a number of universities. A number of Ph.Ds. are already produced. But what is the number in the field? What is in the university rarely reach the field. Therefore, the linkage between the lab and the field, and the university and the industry is very important. This Bill provides for that also. Therefore, this Bill is a very welcome Bill and I am supporting it fully.

Having said that, I would like to make two or three suggestions regarding some clauses of the Bill and mention one or two doubts which I have. Number one, he has already stated that the CSIR would be affiliated to the new Academy. I have no problem. Clause 5 says that after affiliation to the

new Academy, those students who have already enrolled in the existing academy and are doing research under various universities can migrate to the new Academy with the consent of the university. If the university does not give the consent, what will happen? You should have a proviso for that.

Number two, clause 5 again says that the Academy can use or shall be provided with all the manpower and infrastructure of the CSIR. I have no problem. Now there is the CSIR and there is the Academy. Who will control the manpower? Who will have control over the infrastructure? If that is not clearly mentioned, there is certainly going to be a problem. That is a grey area. I want the Minister to clarify that.

Then coming to clause 7, it says that any person, who has got a degree immediately before the new Academy is formed, is entitled to a new degree from the new Academy. That means the old degree is invalidated. What is the need for getting a new degree, when he is already having a degree? When he is already having a degree, why should he get a new degree from the new Academy? You say, "immediately before". What do you mean by "immediately before"? Is it one month, two months, three months, six months or one day? This needs clarification, according to me.

Then, regarding the Board, he says that the Members of the Board can't be re-nominated. I have no problem with that. Then, what is the reason for keeping it as four years? Make it five years.

Coming to clause 18, the constitution of the Senate, as regards the structure, I have no complaint or I have no problem. But the hon. Minister should remember that whatever funds that they are making use of are sanctioned from the Consolidated Fund of India. The funds are given from the Consolidated Fund of India. We, the Parliamentarians, are sanctioning them. We are sanctioning them in the case of all Central institutions, whether it is the IIT or a new Central University. In the Senate there should be one Member from the Rajya Sabha and two Members from the Lok Sabha. That is a must to have a link between the Parliament or the legislature and that body. It is there in all the bodies. But here, in spite of the fact that we are sanctioning the funds from the Consolidated Fund of India, no provision is there for including a Member of Parliament in the body. I want the hon.

Minister to consider this and bring in an amendment so that two Members from the Lok Sabha and one Member from the Rajya Sabha will be included. The Bill is drafted by the bureaucracy. The bureaucracy, perhaps, may not like the MPs to be there. That is natural. I don't mind. I am not talking about the Ministers who were earlier bureaucrats. They would not say that. So, bureaucracy would not like it. They have drafted it. The Minister, being an astute politician, should accept it and he should move an amendment for the inclusion of two Lok Sabha Members and one Rajya Sabha Member in the Senate. Then clause 31 is a very important clause. I congratulate the hon. Minister for bringing it. This clause is on review of the functioning of the Academy by persons of eminence. Again a small trick; 'persons of eminence'. Here also the bureaucracy has played. Persons of eminence will be so and so, ex-IAS, ex-Secretary, etc. I have nothing against IAS. Don't think like that. Here this is a scientific academy; this is an academy of scientists. Here 'persons of eminence' should mean persons of eminence in the field of science and technology. And also, as they are auditing the functioning, there should be persons of eminence from accountancy also. Therefore, I request the Minister to amend that clause and add a proviso that 'persons of eminence' means persons of eminence in S&T and accountancy.

DR. PRABHAKAR KORE (Karnataka): Sir, a Professor is always a research Professor like Prof. Kurien.

PROF. P.J. KURIEN: Sir, I have nothing against IAS. I respect them. I have only said that it was made by the bureaucracy. That is all.

Then this provision of 'audit report' is very good. I think this kind of a provision should be there in all the Central Government institutions. This performance audit or social audit clause has been brought here.

MR. DEPUTY CHAIRMAN: Mr. Kurien, let me remind you that there are two more Members from your Party. ...*(Interruptions)*... He is mentioning it in his own way. He is not giving reply.

PROF. P.J. KURIEN: Sir, I will conclude in two minutes. ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: Professors have a habit of speaking continuously for one hour in a classroom.

PROF. P.J. KURIEN: Sir, this is a very important point. This clause of conducting an audit is very important. I thank the Minister for having included this provision. I am giving a suggestion that the Act should be amended to bring in such a clause in all Central Government institutions.

Here I have one more suggestion. This report by persons of eminence should also be presented to Parliament. There is no such provision here. So I am requesting the Minister to bring in another amendment to present the report of these persons of eminence to the Parliament so that Members of Parliament can go through it. This will be a very good provision.

I do not want to take more time of the House since the Chair has already directed me. This is a good Bill. I welcome it. I congratulate the Minister for having brought this Bill. I am happy that the apprehension of some of our Members, which was a genuine apprehension, that there is no provision for reservation, has been removed. With these words, I support the Bill. Thank you.

Sir, I stand here to support the Academy of Scientific and Innovative Research Bill, 2011, and I thank you for giving me this opportunity. On this Bill, that we have, before us for consideration, two of my senior colleagues, Shri Shreegopal Vyas and Prof. P.J. Kurien, have spoken at length about the merits and demerits of the Bill.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN) in the Chair.

Sir, after going through the Bill, even though I have a lot of things in my mind on this, due to paucity of time, I would try to focus only on a few of them which, I think, are very relevant in the given context.

Sir, our country, until about few hundreds years ago, was a major scientific power. Vyasji also said about the invention of zero. There are so many other achievements in the field of metallurgy, astronomy and so on. In all the fields, our country was a major power. It was a leader in the world in those times. But, over the years, we have fallen down. Sir, you were mentioning about the place of India in terms of scientific achievements. But, year by year, we are slipping down. We stand 62nd in the world, and 62nd position is not a very happy kind of a situation. Many times we wonder what is happening. Today, even in the course of the discussion, as has already been mentioned, our state of

affairs is not very good or promising. But the question is—why it is happening? Sir, we are discussing the symptoms, without trying to understand the disease. And, today, I will try to focus on the disease. Before we started this debate, when the Bill was introduced, our party, in a very big way, tried to draw the attention of the Chair and the hon. Minister towards the lack of provision for reservation in this Bill. And, we are happy that the hon. Minister has agreed to include this provision. But that is not all that we are interested in. Of course, this is a very major thing for us. We cannot allow the interests of the S.C.s, the S.T.s and the OBCs to be overlooked in this Bill or in any other Bill. But, Sir, coming to the main point, why are we lagging behind in our scientific achievements? In one of the surveys done by a leading international magazine, it tabulated a list of 500 Universities which are top in the world. And, in that list, our IIT came at a distant position of 350 or 355. So, amongst the top 500 Universities in the world, our IITs rank 350 or something. Nowhere in the top 100, are we having any place, and we claim that India is a major producer of scientific manpower. In the past two or three decades, we have been claiming that India produces the biggest number of scientific manpower. Quantitatively, yes; but in terms of quality, it is only a third-rate scientific manpower, the manpower which is good for nothing. It is not that I am saying this. Where are we standing in terms of research and technology development? I would say, nowhere. Sir, a few days ago, I was going through the Malyala Manorama Yearbook.

The Manorma Yearbook has a list of scientific achievements. I could not find even a single Indian invention or anything Indian worth mentioning there. The Yearbook has listed three to four hundred inventions and scientific achievements but I did not find a mention of even a single Indian scientific achievement. We claim that we have the biggest scientific manpower!

Sir, I am also a Member of the Department-related Standing Committee on Human Resource Development. They have got a few Bills lined up for enactment, about IITs, and so on. The hon. HRD Minister was here; I think he has left now. When the Sectetary, Higher Education of HRD Ministry was trying to push the IIT Bill, she was talking about the brand equity of our IITs and that IIT was the top institution in the world in terms of scientific achievements. I asked her one thing, and I am repeating that question now. She said that they wanted to open new IITs because IITs had established their name all over the world, not only in this country, in terms of scientific achievements.

I asked her, "Madam, the IITs have been in existence for the last sixty years, or, fifty years, perhaps. Please tell me of any five inventions or scientific achievements in theoretical science, applied science, chemistry, physics, mathematics, engineering or any field of science which the IITs have been able to achieve in the last fifty-sixty years". She was not able to mention even one. Today, the Government is planning to start ten more IITs, draining the public exchequer of more and more money. I want to tell you, Sir, that the best scientific research in our country has come, not from IITs, but from regional Engineering Colleges and these are the institutions where students belonging to the SCs, the STs, the OBCs and the middle and lower classes go. They do not go to IITs. IITians, after their graduation, file their Visa applications and leave the country. We are not concerned with whatever they do outside. But what are the achievements of the IITians here in India?

SHRI RAVI SHANKAR PRASAD (Bihar): Mr. Jairam Ramesh is an exception. He has remained in India. ...*(Interruptions)*...

SHRI PRAMOD KUREEL: But he has not contributed anything to science. Politics, maybe, but not for the science. ...*(Interruptions)*... Yes, you can say 'political science'.

So, this is the achievement of our IITians. And this is the scenario here. Our biggest and the best scientific achievements have come from the non-IITians. Our former President, Abdul Kalam Azad, Kalpana Chawla, Subhramaniam Chandrasekhar etc., were all from small colleges and institutions, not from the big institutions. BHU is one example. So, all these examples are there.

THE VICE-CHAIRMAN (PROF. P. J. KURIEN): Please conclude.

SHRI PRAMOD KUREEL: Please give me some time, Sir. This is a very important topic. I am going to give a few other important examples about where we are lacking. I will give you just two or three examples of what is wrong.

Now, the Government is proposing to declare this Academy of Scientific and Innovative Research as an institution of national importance. We already have a list of some 30 or 40 institutions which the Government is going to declare as institutes of national importance and in which there is

not going to be any SC, ST or OBC reservation. Already, 10-15 Bills are in the pipeline for declaring various institutions as institutions of national importance. Sir, this is a reflection on the mindset of the Government. It is not only about the Bill, which does not provide for any reservation, but also the anti-SC/ST/OBC/ minorities mindset of the Government. The Government is trying to create a kind of a caste system in our institutions of higher learning. You have some institutes of excellence which are 'upper caste' institutions and you have lower caste institutions like the RECs and smaller institutions. The ones belonging to upper castes get bulk of their funding from the Government, in hundreds and thousands of crores, but the smaller institutions are always deprived of funds. The students who are going to the smaller institutions are mostly from socially deprived sections because they cannot afford high fees. I will give one example to show why this Bill cannot succeed even if it comes into operation unless you change the mindsets of our people manning the universities. That example is from IIT, Delhi. This example should open the eyes of everybody. There is a Ph. D. student in mechanical engineering belonging to the Scheduled Castes community, studying in IIT, Delhi. His name is Prashant Bhosle. For the last ten years, he is doing his Ph. D. and his professors are deliberately stopping awarding of his degree. They are denying it for the last ten years. What is the reason? They are sitting silently on his thesis. This very intelligent boy, a boy from the Scheduled Castes, has done his research on a very important thing which can save lives of thousands of people. It is a research on air bags to be used in two-wheelers, motorcycles. Sir, the IIT people continue to deny him the degree even till today. Even then what happened? Three years back, this boy sent his research paper to one of the top universities in America. The American society of mechanical engineering invited this boy to present his paper, in Boston. The IIT people created many obstacles even in that. But, somehow, he managed to go there; he presented his paper there. It was very well appreciated by the American society of mechanical engineers. He came back. Despite that, the IIT, Delhi professors are denying him the degree.

Now, the point is, what are IITs in front of American Institutes. If the Americans can appreciate this boy who has done a good research, there is no reason why his Ph. D. should be denied. Why is this happening? It is happening because of the dirty minds of the people, who are managing these institutions, like the IIT. I have my fear and I would like to draw the attention of the hon. Minister on

this. You cannot do anything for the improvement of science and technology unless this mindset changes. Why are we not growing scientifically? Because, we are trying to exclude 70-80 per cent population of this country belonging to SCs, STs, OBCs and minorities. If you exclude the people saying that they do not have the merit, that they do not have any technical expertise, then where is the future? It is they who creates the Indus Valley Civilization. We should not forget that. They are the people who have contributed a lot to the scientific achievements, in terms of art, architecture and everything. If you deny this opportunity to 70-80 per cent people of the country - to the SCs, STs and minorities - no country can achieve anything in the field of science.

Take the example of China. In China, all sections of the society are being given a fair chance to show and prove their expertise and their excellence. But, here, we are lacking in this kind of a positive mindset by neglecting SCs, STs, OBC's and minorities. That is why myself and my party are pressing in a very big way to include SCs, STs and OBC people not just in this Bill.

Sir, finally, in the Bill which we are having, the hon. Minister graciously agreed on reservation. We have Boards and Senates to look after the welfare of the institutions. In these too, we want a proper representation; we may not call it 'reservation', we may call it 'proper representation' for these people so that at the Senate level, there is no discrimination, which is going on in this country.

With this, I conclude, Sir. Thank you.

SHRI P. RAJEEVE: Sir, thank you for the opportunity. We have given a notice to refer this Bill to a Select Committee to ensure reservation in this Academy. My friend, Mr. Kureel, has already mentioned the importance of weaker sections of the society for the development and advancement of our country. Due to the move of the Left and other Opposition Parties, the Minister is compelled to come with an amendment to ensure the reservation. As per the 2007 Act, there is no provision to ensure reservation to SCs and STs in the institutions of national importance. So, this amendment is required. I congratulate the Minister for moving this amendment.

Sir, while participating in the discussion, Prof. P.J. Kurien has made some serious observations and proposals to ensure the accountability of the Academy to the Parliament. It is a very

important observation. But, what is the reality, Sir? Now, we are discussing the Bill to establish this Academy with all seriousness. But this Academy is already established without taking the consent of the Parliament. As per my knowledge, it is already functioning. As per a gazette notification, it has been established, without taking the consent of Parliament. The Lok Sabha has passed this Bill. Now we are discussing whether it should be sent to the Select Committee or not, and what would be the provisions of this Bill. But the Ministry without taking the consent of Parliament has already established this Institution. This not a good move. This is not a right move in a democratic system. It should be established after passing the Bill in Parliament. This is not a good thing.

Sir, I would like to make some observations and express certain objections to this Bill. The Academy of Scientific and Innovative Research Bill is intending to increase the number of researchers in integrative and inter-disciplinary areas of science and technology. Sir, now, we have made some comparisons with China and other countries. Then, we should also make some comparison of prior-1990 and after-1990, pre-liberalisation and after-liberalisation. Before 1990, India had produced more PhDs than China, Korea and other Asian countries. That is the reality. But, post 1990, the scenario started changing with the adoption of new economic policies under the liberalised regime. The change is visible, especially in the academic field, Sir. At present, the position is that despite institutions like IITs -- the role of IITs has already been mentioned -- India has a severe shortage of Ph. Ds in the field of science and engineering. As per the data made available, India produced around 8420 Ph. Ds. in science and engineering compared to 22953 in China, 9961 in U.K., 30452 in USA in 2006. Sir, in engineering section, India produced only 1058 Ph. Ds as against 2130 in China, 2267 in South Korea and ...*(Interruptions)*... and 2304 in U.K. and 7402 in USA, Sir.

Sir, the attempt to increase the quantity of Ph. Ds is good. It is stated in the Statement of Objects and Reasons that it is expected that the Academy would produce from fifth year onwards 1000 Ph. Ds in science and technology and 120 PhDs in engineering. It is like a factory that they are producing thousands of Ph. Ds Sir, the ambition is good. But what would be the quality of this research? That is more important. So, I request the hon. Minister to ensure the quality of research. Sir, the CSIR was established in 1942 to achieve self-reliance in the area of science and technology.

The national laboratories became the major driving force in this endeavour between 1970 and 1990, and did a wonderful job in the strategic sector. The impact of neo-liberal policies is already visible in different sectors of India. Over the past decade, the research culture in the CSIR institutions has been vitiated as they have been forced to tie up with industry to generate resources. Sir, now the CSIR is giving fellowships to research scholars. They are doing their research in universities. This is helping the universities to strengthen their quality of research and to improve their infrastructure.

Sir, what would be the impact after the establishment of this Academy? I would like to know whether the existing system would continue. Otherwise, it will be brain drain from the universities to the centralized Academy. It is not good in a federal system. The existing pattern should continue. Sir, while going through Clause 25 of this Bill on Financial Memorandum, it says that the Academy would function as a self-financing mechanism. Already Prof. P.J. Kurien has mentioned the lack of funding in research sector. It is .8 per cent of the GDP. As per Clause 25, this University is intended to function as a self-financing mechanism depending upon the fee, depending upon the projects and other things. ...(*Time-bell rings*)... request the Minister to revisit this provision and give more funds and increase public funding for research.

Sir, the Board would be a nominated one. According to Clause 11, the Board is a nominated one. My suggestion is that the representatives of the faculty of CSIR should be elected from the faculty and all other Board members are nominated by the Government. This Academy would function as a republic with full autonomy, with no control of Parliament or any other mechanism. There should be some mechanism to ensure the accountability of the Academy to the Parliament. There is one more suggestion, Sir. There is no provision to accommodate the weaker sections and women in the Directors' Board. This Board has a lot of power but there is no representation of women and the SC/ST communities. ...(*Time-bell rings*)... I am concluding, Sir. There should be sufficient mechanism to address the grievances of the employees of the Academy. The Bill is devoid of social commitment and explicitness. With neo liberal policies, the Bill is favouring big industries and is silent on our own rural industries. ...(*Time-bell rings*)... I request the Minister to look into these suggestions. Thank you, Sir.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Hon. Members, there are 12 more speakers. After this Bill we have to take Railway also. Therefore, I request you to please confine yourselves to your parties' time. ...*(Interruptions)*... Please. ...*(Interruptions)*... Shri N.K. Singh. ...*(Interruptions)*...

SOME HON. MEMBERS: Railway should be taken tomorrow. ...*(Interruptions)*...

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): In any case, every Member should confine to his party's time. ...*(Interruptions)*... You please start. ...*(Interruptions)*... You please sit down. ...*(Interruptions)*... That will be informed. ...*(Interruptions)*... We have no time.

SHRI M. RAMA JOIS: Sir, I have given representation under Rule 125.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): That will be taken up.

SHRI M. RAMA JOIS: When?

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): At an appropriate time.

SHRI M. RAMA JOIS: Without hearing me ...*(Interruptions)*... You should hear my reasons why I have requested for referring it to the Standing Committee.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): You cannot unnecessarily say it now. At the appropriate time you tell. Now you sit down. ...*(Interruptions)*... Please. You are talking about your amendments. We will take up this when we take up clause-by-clause consideration.

SHRI BALAVANAT ALIAS BAL APTE (Maharashtra): He has given a representation under Rule 125, therefore, let him say something. You cannot just brush it aside. ...*(Interruptions)*...

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): I will go by the list, and, if necessary, at the end, he can stand up, and not when I call him. Okay. It is not that when I call him. Okay.

SHRI N.K. SINGH (Bihar): Thank you, Mr. Vice-Chairman. In view of your special directive to confine to the stipulated time, I shall endeavour certainly to subscribe to what you say. First of all, I think the Minister needs to be complimented because the promise to bring such a Bill was contained in the President Pratibha Patil's Address to the Joint Session of Parliament where it had been

promised that within 100 days efforts will be made to bring about a proposal for fostering India as innovation destination. It has taken up nearly two years to be able to do so. Sir, I wish to begin by bringing to the hon. Minister's attention that the origin of this Bill is partly contained in the Report of Vijay Kelkar in 2003 and that is what he had said: "That the CSIR laboratories should *inter alia* strive towards creating an ambience of nurturing excellence and high quality human resources on a sustainable basis". Now, I put it to you, one of the points, Sir, which was also made by you when you were speaking on this, that this Bill can at best be the beginning of a long effort to create an ambience and to foster a culture in which the society recognizes and society rewards innovation. Sir, I had the privilege of visiting the North Carolina University which I am sure many hon. Members have visited. It is the hub of global research. I tried to find out what is so great about North Carolina University and what is great is that researchers from all over the world find that the atmosphere of research quality, what fosters innovation, what prompts people to the frontiers of knowledge is something which is available in North Carolina, which is what makes it a centre of global innovation at the cutting edge of knowledge. Sir, you were very right when you said that we need to change and bring about a societal change in the whole system in which pedagogy is really pursued in this country. How to move away from a rote system of learning to a system which rewards innovation and a system where parents accept failures? If parents do not accept failures from children you will not foster children into pursuing areas which are the uneven path. So, I think, we do require a very fundamental change and this is not a one day job and, I hope that this particular effort would be the beginning of a long sustained effort for this kind of awareness. In view of the shortage of time, Sir, I will confine myself to making just six suggestions for the Minister's long term consideration. First, I think, that the proposed academy must in no way weaken the existing university system and the Government should strive that the academy works complementarily with the existing university system. I think, Minister's special efforts need to protect the existing university system and fostering a degree of complementarity. Second, I must point out, that I gave you the example, Sir, of what happens in North Carolina. One of the principle things that happen in North Carolina is that there is autonomy. There is freedom and there is creativity. We must admit that what has bedeviled the Indian university system and our research organisation is excessive Governmental interference,

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excessive bureaucratization and in all the Bills which have been brought by the HRD Ministry, there has been a tendency to overload Committees which excessively bureaucratizes this and cuts away at the kind of autonomy which would bring researchers into play. My third point really, Sir, is that there is need to promote socially relevant innovations for practical usage to help developing small and medium enterprises. Sir, I wish to draw the hon. Minister's attention to the minutes of the second Committee of the Standing Committee which went into this and to just quote one little sentence of what Mr. M. S. Swaminathan, an esteemed colleague of ours, had to say, "That the Bill proposed to establish this should not become one more Ph. Ds. producing machine but it should foster non-degree, diplomas and programmes which would help upgrade a technical capacity or small scale rural industry sector." In this context he cited the Chinese concept of township and village enterprises. It also emphasized that the academy should not focus only a number of researchers and patents but should ensure that conversion into products and goods for societal benefits. Sir, I have two more points to make, Sir, and I crave your indulgence. I will go through them very quickly.

The academy should also foster non-degree and other programmes of skill development. This is exceedingly important, Mr. Minister, because they require local solutions, local research which may not be covered by one omnibus arrangement. And, we, therefore, need to make sure how do we promote the culture of this and the formation of skills which can bring about local solutions to problems.

Finally, Sir, I wish to draw the hon. Minister's attention to something which I find as an informative. I draw his attention to the Financial Memorandum of this Bill, particularly to Article 4. What does this Article 4 say? It says, 'The Bill does not involve any expenditure of recurring and non-recurring nature directly from the Consolidated Fund of India.' At the same time, I find, the Standing Committee had specifically considered this, it certainly wanted to leave the option open for being able to secure Government grants and for programmes of this to be financed through public outlays and through public research, in addition, through public private partnership.

These are some of the suggestions that I wanted to place before the House while supporting the Bill. Thank you.

SHRIMATI VASANTHI STANLEY (Tamil Nadu): Thank you Mr. Vice-Chairman, Sir, for giving me this opportunity to speak on the Academy of Scientific and Innovative Research Bill, 2011. I welcome the Bill under discussion. Being an advocate of education for myself, I support any policy that promotes the cause of education and literacy.

Here, we are expressing our views that India is lagging far behind in research. But, I feel, our country was the pioneer in all the research works. We Aryabhata -- have given 'Zero' to Mathematics. We have got so many things at our credit. We have the Nalanda University. All the foreigners used to come here for research work. And, Kanchivaram, in Tamil Nadu, again, speaks the glory of our research work and scholarship. And, I hope, this little step, through this Bill, the hon. Minister would take a step forward to take our nation to the past glory.

It is a fact that there is a shortage of educational institutions that cater to the interests of students who aspire to pursue advanced, integrative and inter-disciplinary courses and Ph.Ds. in science and engineering. India, at the moment, does not seem to be keeping pace with the rest of the world in producing Ph.D. scholars. We are comparing ourselves here with China and saying that China is producing over 20,000 Ph.Ds. per year, but India managed a mere 8,000 Ph.Ds. in 2006. The Academy alone is expected to produce 1,000 Ph.Ds. in science and 120 in engineering annually from its fifth year onwards. It is really heartening to hear this.

Sir, this Academy will not only increase the number of researchers but will ensure that it functions in a cost-effective manner. Additionally, it will also be recognized as an institute of national importance. I see its potential in becoming a world-class institution.

I welcome this Bill with the following points:

I would like to express my concern over the composition of the various authorities. Mr. Vice-Chairman, Sir, as you said, the Board, the Senate, Director and Boards of Studies that would head the Academy include eminent personalities in the field of science and technology. While welcoming

this move, I would like the hon. Minister to see that all our apprehensions about proper representation, backward entry, etc., are properly addressed. I hope the hon. Minister will clarify this.

This Bill will ease the registration procedure for scientists pursuing research in 37 laboratories of the CISR which are currently registering at different universities. It is a welcome move. In a way, it is channelizing all the students to a one particular place. But, my concern is: this academy should complement to the functioning of the universities and I hope it will not stand in between and become 'disadvantage' to other universities in their functioning. I would also like to express my concern here. Will it not overburden the CSIR? What are you going to do to strengthen the CSIR? All the currently functioning universities are channels to the CSIR. Have you done anything to strengthen the CSIR? I would like to know this. Otherwise, this will overburden the CSIR and, in turn, it will not help the research people. This is my concern over it.

My next point is that it would not require significant gestation periods and the Central Government's funds. It will generate its own resources through funds received through grants, donations, investments made by the Academy itself, etc. It will function on a self-sustaining mode. This is a very, very encouraging thing. ...(*Time-Bell rings*)... But I would like to ask whether it will not, when it is generating funds on its own, encourage partiality or bias while selecting students. If it is funded by the Government, we will naturally have reservations and all other things. But when we say that it is going to function on its own, not depending entirely on the Government's funds, I hope the hon. Minister will take proper steps to ensure that there is no partiality and there are no biased views. It will be requiring infrastructure and academic potential in terms of research and curriculum designing, in addition to conferring appropriate degrees. Here also, I would like to know whether the infrastructure of the CSIR is more than enough. ...(*Time-Bell rings*)... Have you done anything to improve it? ...(*Time-Bell rings*)...

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Conclude please.

SHRIMATI VASANTHI STANLEY: It will impart training in those academic areas which are not regularly taught in other universities. I welcome this move. Of the 4500 scientists, present at the CISIR, 2500 may even be used in promoting the proposed Academy. That is your main wish. But I

would just wonder whether those 2500 scientists will come forward to take up your burden. If at all it happens, in establishing programmes with industries in India and abroad, it would surely make a headway in promoting the science and technology. *(Time-Bell rings)...*

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Please conclude. ...*(Interruptions)...*

SHRIMATI VASANTHI STANLEY: I am particularly glad that there are special provisions for the employment/admission of women, differently abled citizens, people belonging to weaker sections of society specifically the Scheduled Castes, the Scheduled Tribes and other socially and educationally backward classes of citizens. ...*(Time-Bell rings)...* Just two more minutes, Sir.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): No; no. ...*(Interruptions)...*

SHRIMATI VASANTHI STANLEY: Sir, this is a very important Bill. Please give me two more minutes. It is also noteworthy that the Academy will have a flexible compensation system in place that will judge according to performance. I support the Bill for taking into consideration the recommendations of the Standing Committee about adequately including women scientists and technologists in the Board of the Academy. ...*(Time-Bell rings)...* Just one more point, Sir. ...*(Interruptions)...*

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): No; no. ...*(Interruptions)...*

SHRIMATI VASANTHI STANLEY: Sir, I also support the Committee's proposal to include other well-established institutions within the purview of the Academy to be more broad-based. ...*(Time-Bell rings)...*

With these observations, Sir, I welcome this Bill. Thank you very much.

DR. JANARDHAN WAGHMARE (Maharashtra): Thank you, Sir, for giving me an opportunity to talk on this Bill. At the very outset, I would like to congratulate the hon. Minister for moving this Bill. The title of the Bill suggests that this is a unique institution. The main focus of the Academy of Scientific and Innovative Research Bill is on research. But, at the same time, this is going to be a teaching institution also. Teaching and research have been the two most important objectives of any

university. But, this institution should rather be different from traditional universities. The word 'academy' is associated with the name of Plato, who had established an academy at Athens in ancient times. Therefore, the spirit of this Institution should be the spirit of renaissance- revival of learning and discovering new things in the world. Sir, from the very objective, it seems that the Academy aims at research. But, whether it is going to tread the same beaten path; that is the main problem. Universities in our country have been very traditional. They have not made a very, very significant mark on the history of education. They lack in research, in fact. But this Institution is not going to do research only; it is going to do innovative research. The word 'innovative' is very important. What is 'innovation'? 'Innovation' is the spirit of going to the roots of things, finding the truth and getting inventions in this world. If this is the spirit, then, the University will have its own aims fulfilled. The word 'Academy' need not be only a novel name. This is not a novelty. We do not want novelties in the field of education; we want innovations. Our Prime Minister has declared this decade as the Decade of Inventions; therefore, this is very important. As Nehru had said somewhere, "A university stands for humanism, for tolerance, for reason, for adventure of ideas and for the search of truth. It stands for the onward march of the human race towards even higher objectives." If this Academy keeps this aim in that, perhaps, it is going to be a national university in the real sense. Sir, what is the main problem? The main problem is the faculty. From where are you going to get faculty? In Maharashtra alone, there are 17,000 posts which are vacant. In our Central Universities, State Universities and in most of the Centres of Higher Learning, there are no teachers at all. Faculty position is really very crucial. So, I would like to bring to the notice of the hon. Minister that this problem is going to be a very crucial problem in future. ...(*Time-Bell rings*)... That is why, the spirit of Richards has to be kept in mind. The scientific temper is also very important. This Institution should not produce only Ph.Ds. let me be very frank about it. Let us go beyond Ph.Ds. There should be a thrust. You will have to explore new areas of research. Therefore, I request our hon. Minister to give his mind to all these things. In any way, this Institution should not be a copy of other Universities. This should be a completely new, very innovative. Thank you very much, Sir.

प्रो. राम गोपाल यादव (उत्तर प्रदेश): थैंक्यू सर। माननीय मंत्री जी, एकाडमी ऑफ साइंटिफिक एंड इन्नोवेटिव रिसर्च की स्थापना करने जा रहे हैं, यह एक बहुत अच्छी चीज है। लेकिन प्रश्न यह है कि केवल एकाडमी को स्थापित करने से ही बहुत अच्छे ब्रेन आपको नहीं मिल सकते, जब तक उसमें जाने वाले ब्रिलिएंट

स्कॉलर्स न हों। देश की स्थिति यह है कि जो सबसे काबिल लोग हैं, लड़के हैं वे सबसे पहले आई.ए.एस. बनना चाहते हैं। अगर वे आई.ए.एस. नहीं बन पाते हैं तो वे आई.आई.एम. में जाना चाहेंगे या बिजनेस मैनेजमेंट का कोर्स करना चाहेंगे। उनका एक टेस्ट होता है कि कहीं बढ़िया पैकेज मिले किसी मल्टी नेशनल कंपनी में और अन्ततोगत्वा उनका लक्ष्य होता है कि वे अमेरिका में जाकर स्थापित हो जाएं। यह स्थिति है। हमें बेसिक चीजों पर जाना पड़ेगा कि जो हमारे प्योर साइंस के स्टूडेंट्स हैं, जो M.Sc., Physics और Mathematics पास किए हुए हैं, वे आज मारे-मारे घूम रहे हैं। उनको कहीं बैठने की जगह नहीं मिलती है, वे कहाँ जाएं? उनके लिए कोई न्यू क्रिएटिव जॉब्स भी नहीं हैं। जो आप जूनियर फैलोशिप देते हैं, वह इतनी कम देते हैं जिससे उनकी फंडामेंटल रिसर्च की और जाने में कोई रुचि नहीं रहती है। वे इस ओर मजबूरी में जाते हैं। जब तक उनको इस तरह की कोई मदद नहीं मिलेगी तब तक आप चाहे कितनी भी innovative academies खोलिए, कुछ नहीं होगा।

दूसरी बात यह है कि आप केवल एक ही क्षेत्र में रिसर्च करने की कोशिश कर रहे हैं। आज veterinary के क्षेत्र में कोई रिसर्च हो ही नहीं रही है और यदि हो भी रही है, तो वह केवल नाममात्र की रिसर्च हो रही है। इस क्षेत्र में रिसर्च होने से देश का बहुत कल्याण हो सकता है। एग्रीकल्चर कमिटी की रिक्मेंडेशन हैं और लगातार कई बार सिफारिश भी गई हैं। CPM के एक लोक सभा के MP थे, अब उनकी death हो गई है, उन्होंने कई बार सिफारिश की थी कि इंडियन काउंसिल ऑफ़ वेटेनरी रिसर्च, ICVR को CSIR के पैटर्न पर खोला जाए। उसमें भी रिसर्च की ज्यादा संभावनाएं हैं और बहुत ज्यादा काम हो सकता है। यदि आप केवल एक ही हिस्से को लें और दूसरे हिस्से को छोड़ दें, तो इससे असंतुलन पैदा होता है। आपको इस क्षेत्र से बहुत कुछ मिल सकता है, आज इस क्षेत्र की उपेक्षा हो रही है, veterinary क्षेत्र में भी रिसर्च हो, इस तरह की आपकी कोई व्यवस्था होनी चाहिए।

मेरी तीसरी बात यह है कि जो आपने स्पष्टीकरण दिया था कि जब कोई संस्था national eminence की हो जाती है, तो उसमें रिजर्वेशन की बात नहीं रहती। हम लोगों को और हमारे सब साथियों को आशंका थी, आपने उस आशंका का निराकरण कर दिया। आपने कहा है कि SC/ST, OBC का रिजर्वेशन साढ़े बाईस परसेंट और सत्ताईस परसेंट रहेगा। आपने यह बात फ्लोर ऑफ़ दि हाऊस में कही और आप इसके लिए संशोधन भी लाए। इसके लिए आपको बहुत-बहुत धन्यवाद। मैं ज्यादा कुछ इसलिए नहीं कहना चाहता हूं कि हमारे साथी बहुत brilliant हैं और आप स्वयं फिजिक्स के प्रोफेसर रहे हैं, आपने बहुत अच्छी बात कही है। प्रो. प्रमोद कुरील साहब और व्यास जी ने भी बहुत अच्छी-अच्छी बातें कही हैं। मैं अधिक समय नहीं लेना चाहता हूं और मुझे BAC की मीटिंग में भी जाना है। बहुत-बहुत धन्यवाद।

THE VICE-CHAIRMAN (P.J. KURIEN): Thank you, Yadavji. Thank you, Yadavji. Now, Shri Baishnab Parida.

SHRI BAISHNAB PARIDA (Odisha): Sir, at the very outset, let me express my thanks for allowing me to speak on this important Bill.

I rise to support the Bill with his amendments to establish a World Class Academy of Scientific and Innovative Research in association with Council of Scientific and Industrial Research. If this Academy of Scientific and Innovative Research functions properly, it will meet the growing requirements of research and innovation by conducting courses in inter-disciplinary and multi-disciplinary areas covering natural sciences, life sciences, mathematical and medical sciences, engineering, applied arts, humanities and social sciences.

Sir, we are passing through an era of explosion of knowledge. Knowledge is considered as economy, and prosperity of a nation is now measured by the number of scientists and engineering Ph. Ds. that it produces. Once, the leading universities of India such as those at Kolkata, Mumbai, Chennai, Delhi along with numerous other research institutes provided fertile ground for nourishing and developing Science in India when India wanted to achieve self-reliance in the field of Science and Technology. Our national laboratories became a major driving force to perform worthwhile jobs in the strategic sectors between the 1970s and 1990s. At that time, India was producing more Ph. D. scholars than China, Korea and other Asian countries. After the 1990s, we started with the policy of liberalization and globalization, but in the field of Science and scientific developments we lagged behind. The scenario changed after the 1990s. India lagged behind with a severe shortage of Ph.D.s in the field of Science and Engineering. I do not wish to provide any data here. Some of my friends have already mentioned how in 1996, India was producing only 2006 Ph.D. scholars whereas China, South Korea, UK and USA were far ahead of India in this field. If this shortage continues, it would seriously affect our global competitiveness and economic growth in the long run. Unless opportunities are created indigenously, there is a possibility of losing a large number of brilliant students of inter-disciplinary subjects in Science and Technology to other countries.

Sir, arguments were made by some of our learned friends that it would be more prudent to strengthen the existing infrastructure of our universities to produce a greater number of Ph.Ds. by increasing the quality of research rather than setting up a new academy for the same purpose. Sir, I would like to say that there are more than 500 universities in our country and the Central Government has already started establishing Central universities in India, but our universities are carrying out basic

and curiosity-driven researches. No university offers training programmes in technology transfer from its laboratories to the market places and to industrial processes or other productive processes.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Please conclude.

SHRI BAISHNAB PARIDA: Moreover, our present educational system is job-oriented. My friend here was talking about why we were lagging behind; it is because our education is job-oriented. It is not research-oriented. No university in India finds a place in the top hundred universities of the world. Even IIT, Mumbai, which is considered the topmost research institute in India, does not find a place in the top 350 universities of the world.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Please conclude. You have taken a lot of time.

SHRI BAISHNAB PARIDA: Yes, Sir. I would conclude now.

There is a serious shortage of workforce in knowledge-based wealth generation in India. If the Academy of Scientific and Innovative Research could be a world-class institute, it would be a great institution producing scientific manpower for India to compete with the other world powers.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Please conclude.

SHRI BAISHNAB PARIDA: Then, Sir, about the establishment of the universities, there is a tendency to establish national institutes in big cities. There is a tendency to have urban-based institutes. ...*(Interruptions)*...

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Please, conclude. You have taken up a lot of time. You have taken three minutes more than the time allotted to you. ...*(Interruptions)*... We have to finish the discussion.

SHRI BAISHNAB PARIDA: Sir, I must thank the hon. Minister for including the provision for reservation in the Bill. Also, I feel that the educational system should not grow vertically alone, it should be horizontal, educating a number of students including those from the deprived areas lagging behind in education.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): You have taken six minutes instead of three minutes. Now, Mr. Bandyopadhyay. Only three minutes, please.

SHRI D. BANDYOPADHYAY (West Bengal): Sir, I rise to support the Bill but I have some apprehensions. The Bill clearly says that its objective is to produce more PhDs. We are already producing 8000-odd PhDs a year. But the quality of Ph. Ds that we are producing is very, very poor. I have been told by some people, very knowledgeable people, that not more than 3 to 4 per cent of PhD dissertations that come out of Indian Universities are of international standards and 97 per cent are all washout. Mainly because of computer revolution and internet, they can get things from different sources, categorise them and produce a document for Ph.D which if found out by somebody else under the copyright and as a result a suit is filed. So, this is the quality of Ph. D. If we are going to have another institute producing PhDs in the name of Advanced Academy of Science and Research, that will not add to our knowledge. My point is very simple and I will not take much of your time. How do we increase the fundamental research? Most of the PhDs that come out are on Applied Science. Mathematics, pure Physics, pure Chemistry, etc., are not being looked at at all. If we don't go for fundamental research and fundamental sciences, it will not take us far. This is a very important point. This Academy should try to give support to fundamental research in all disciplines, not to the applied science only. There is another apprehension that I have got. My hon. friend already mentioned that Financial Memorandum, Clause 4, of the Bill states it would not involve any expenditure of recurring or non-recurring nature directly from the Consolidated Fund of India. It is supposed to generate fund. Who will give you fund? Will it take sponsored projects from the private sector? In that case, the PhDs that will come out will be biased and misdirected. If you are really establishing an unstable fundamental research you must fund it. I must end by saying that our universities are lagging behind. Sir C.V. Raman's Raman Effect came out of the College of Science in Calcutta; J.C. Bose' Radio Telephony -- though he did not patent it and Marconi got it and became a billionaire -- came out of the College of Science in Calcutta. So, our universities were to produce fundamental research in sciences. Today, except Saha Institute of Science of Nuclear Physics in Kolkata and Bangalore Institute of Science, no other university and institution are coming up with any fundamental research. So, I would request the hon. Minister, through you, to not to give so much importance to quantity but give importance to quality. $E=mc^2$ is something which revolutionised the whole world of science. That $E=mc^2$ is not coming out from any university now. I would request the

Government to give importance to fundamental research and quality of research while working on producing PhDs.

DR. ASHOK S. GANGULY (Nominated): Hon. Deputy Chairman, Sir, first of all, I wish to support this Bill whole-heartedly. I have just got a few suggestions. I know that when you are in the Chair, you always look at the clock. First of all, I would like to suggest to the hon. Minister, through you, to consider the name of the Bill as the CSIR Academy of Advanced Scientific Research Bill, 2010 rather than using terms like 'Innovation' and others which are getting a bit redundant. Sir, everybody has spoken, including you, that there is a challenge to India's higher education. India's higher education is in great and deep trouble. I think, the quality of our post-graduate work, as Mr. Bandyopadhyay and many other eminent speakers have said, Mr. Kureel has mentioned ...*(Interruptions)*... The point is that deterioration of quality is so bad ...*(Interruptions)*... Mr. Vice-Chairman, may I continue to address you?

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Yes, please continue.

DR. ASHOK S. GANGULY: Sir, I was associated with the CSIR for many years, both in the society as well as in the Council. So, I have got an intimate knowledge and great respect for this institution. It has a long and distinguished history from pre-independent India till today. It served a very-very important national need during severe crisis of foreign exchange in 1960s. We should not forget this. CSIR has a distinguished history. And, in the area of import substitution, when we ran out of foreign exchange, the CSIR played a very important role. Therefore, when it is suggesting that it propose to set up Research Academy, it has to be taken very-very seriously because it has to grow out from the role it has played in the 20th century in to the role that the nation expects it to deliver in the 21st century. CSIR is one of the major supports for Indian industry and especially for the small and medium enterprises in this country. That role must continue. CSIR should not forget that important role in the pursuit of purely academic research only. However, the hon. Minister and the Director General of the CSIR, who is in the gallery today, must ensure the quality of the CSIR Academy that they are planning to set up. It must not be just another institution of higher learning, but must be an exceptional institute of contemporary higher learning so that we can start reviving.

We are falling into a depth. You yourself defined it while you were speaking. So, we have to come out of that pitiable state of affairs. I agree with you that every section of Indian society has to contribute to that effort. Therefore, it was unfortunate that we had this debate whether there should be reservation or no reservation. I think, it is a redundant debate. Every Indian must have an opportunity to get into every institution without any hindrance of caste or community. Now, that is given. But, every Indian must take the oath that we have to raise the quality and we must not bring the quality down. And, that is my request to the hon. Minister. I particularly believe that this institution, if it comes out as per the debate, as per the proposal in the Bill that is being debated, it is going to add lustre. It will start the revival of Indian academic decline. I sincerely hope so. I wish it all the best. I know that we are running out of time for the debate I do not wish to add much because many distinguished people, including you, Mr. Chairman have spoken with such erudition and passion that I feel insignificant in this great debate about research in India. But, I thank you for giving me this opportunity and I wish the institution all the best. Thank you very much.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Thank you, Gangulyji. You always make good points and stick to the time limit. Now, Dr. Barun Mukherjee; you have five minutes.

DR. BARUN MUKHERJI (West Bengal): Sir, I rise to support this Bill with some of my comments on it. First, this Academy is going to be an institute with its own special character. In fact, it has all the scope and potential to become one important institution of national importance for scientific and innovative research. We may reasonably have good expectations from this Academy, as it is stated in the Statement of Objects and Reasons, "primarily focus on research and imparting instruction in such areas as are not ordinarily taught in regular academic universities in India." I hope the proposed Academy would be able to achieve this objective in its future activities. Secondly, the proposed Academy, in its initial draft had set its objective of producing more PhDs "to keep pace with other countries". But the Standing Committee on Science and Technology, Environment and Forests, of which I am a Member, and, to which the earlier draft was referred for examination, was of the opinion that the proposed Academy should not become one more PhD producing machine. Moreover, I wonder whether the scientific progress of a country is dependent on the number of PhDs being produced, and, whether the sponsoring department of CSIR is maintaining a track record of

how these PhD holders are being engaged for the industrial growth of the country. In fact, the essence of the issue lies in successful implementation of PhD dissertations. I am happy that the Bill is now revised eliminating all these lapses. I hope the proposed Academy will devote its energy and activities to this aspect.

One very encouraging aspect of the proposed Academy is that it "shall be provided or allowed to use the infrastructure and scientific manpower of the Council of Scientific and Industrial Research for teaching and research purposes for mutual benefit". The CSIR is having its goodwill and reputation since the pre-Independence days and is presently having a large number of scientific laboratories spread over the whole country as well as very strong team of devoted experts, well recognized in their respective research areas. I welcome this type of relationship of the Academy with the CSIR.

On another controversial point regarding reservation, I am happy with the revised Bill, with the official amendment along with the hon. Minister's announcement and assurance in the House for full reservation for the SC/ST/OBC and minorities to be provided in the proposed Academy. Moreover, the Academy is not looking for strictly any Government's Budgetary support, rather it is relying on its receivable fees of all types; moneys by way of grants, gifts, donations, etc.; and, funds from the Council of Scientific and Industrial Research, by way of loan or otherwise. It is definitely a new way or approach to run such an Academy. But we are having some reservations. When it is stated that the Academy would also depend on "moneys received by the Academy in any other manner or from any other source", I would like these 'other sources' to be well-defined and clearly stated. With these words of caution, some suggestions and compliments, I welcome the proposed Academy and support the Bill. Thank you.

SHRI BALAVANT ALIAS BAL APTE: Sir, this Academy of Scientific and Innovative Research Bill, 2010 is a welcome addition to what we are trying to do with education. Sir, let me first mention my lament that our view of education in this country continues to be fractured. We condensed education to be only a resource development, and, therefore, we stopped talking about education in terms of education. Several Bills are brought in this House for raising the standards of education, but

their source is not one. If it is education regarding social welfare, the Social Welfare Ministry will pilot the Bill; if it is regarding an international university, the External Affairs Ministry will pilot the Bill; if it is regarding science and technology, the Science and Technology Ministry will pilot the Bill. We don't have an integrated approach to higher education in this country and that is why we are suffering. That is the basic reason.

Secondly, Sir, I would like to welcome this Bill because, for the first time, it is aiming at research with inter-disciplinary and multi-disciplinary approach. Our research and our education have been always a single-faculty approach and, therefore, a student in one discipline cannot touch the other discipline. That is how the courses are arranged. Therefore, it is a welcome sign that we will now be having in this academy an inter-disciplinary and multi-disciplinary approach.

Sir, in so far as the relationship between the CSIR and this academy is concerned, a person very involved in the CSIR says that this is a CSIR academy. I believe that Council is doing some good work, but it is necessary for the health of this academy to whean it away from the CSIR as early as possible. Today, you are not asking for any money because whatever money is given to the CSIR has to be diverted to this academy to survive. Therefore, provide for money for this academy independently in your budget head. Don't make it dependent on the CSIR and don't burden the CSIR with the conduct of this academy so that CSIR does not suffer in its work. Therefore, my urgent request is to when it away as early as possible and provide for money for it.

There is a reference in the legislation to industry and there has to be an interaction between the industry and the academy. Industry needs a particular kind of research. Industry provides for some R&D for purposes of satisfying the auditors, but industry is not doing that work which this academy should do and then get support from the industry. It can be quid pro quo. The industry gets the benefit of education and then the industry must spend for it. And if that, relationship between the academy and industry is established by a continuous dialogue, the academy will have enough funds for purposes of research.

There was one more thing in so far as running of this institute is concerned. The law provides for running several kinds of courses and enrolling students. The academy should not fall to a situation where it will also be producing meaningless degree-holders. The academy must confine itself to the

higher education in so far as research is concerned. We have a proliferation of universities that are producing graduates in all categories of disciplines. But all these universities are lacking in research. In fact, research is almost absent in most of the universities. If that is so, then this academy should concentrate on research. Entry to this academy should begin with post-graduate people. Their areas of research can be varied. Their areas of research can be having a direct link with the industry which needs research. Then we can be having a real academy of scientific and innovative research.

There is always a reference to China. It is said that thousands of PhDs are produced by China. I do not know the worth of that. But any reference to China in this country and comparison with China is a little anomalous, because this country, according to others, or, according to China, has the handicap of democracy. According to us, that is the strength of this country. Therefore, comparison with China is comparison of democracy with dictatorship. Democracy has to be real. We will go by our own way and at our own speed which is possible in a vibrant democracy like ours. Therefore, let us not compare ourselves with China. With our strengths, with our capacity, and with our talent, we will go ahead of China in the near future. Therefore, let us not compare ourselves with China.

Lastly, in so far as research is concerned, in this country it is necessary that research is remunerative. The time has gone when people used to go in for research only with a pittance. Now research must be remunerative. Why students are not going in for research? Because they are getting remunerative jobs at other places. Students of science and technology get remuneration in lakhs of rupees in industries. Therefore, they are not going in for research. Research must be remunerative and, for that, this academy will need money, which you should provide. This academy is not only an appendage of the CSIR. If it is going to produce really good innovative research, then the researcher must be well provided for. Make research remunerative, make admission competitive and wait, because it will not produce immediate results. The researcher has to be paid well for years, so that he brings out innovation which will be the pride of this country. Have no doubt in mind. There is no dearth of talent. Even with everybody going to industry, there is enough talent. There are people who really want to do research but they cannot do it because they have no opportunity. Please give advantage to that talent through this academy, so that this academy will be successful.

डा० प्रभा ठाकुर (राजस्थान): उपसभाध्यक्ष जी, हालांकि मैं विज्ञान की छात्रा कभी नहीं रही और मैंने हिन्दी साहित्य'श् से एम.ए., पी.एच.डी. किया, लेकिन अपने अनुभव से मैंने यह जाना कि दरअसल जो विज्ञान है और जो वैज्ञानिक प्रक्रिया है, उस प्रक्रिया के अधीन ही पूरी प्रकृति चलती है। चाहे वह धरती का संचालन हो, समुद्र की लहरों का संचालन हो या चांद, तारों व सूरज की गति हो, वे सब कहीं न कहीं एक वैज्ञानिक तकनीक से बंध कर चलते हैं, इसीलिए यह सृष्टि कायम है और इसीलिए यह ग्लोब, यह ब्रह्मांड कायम है। इस प्रकार, प्रकृति के अपने मिजाज में ही एक वैज्ञानिक अंदाज है, जो कि परिष्कृत होकर हमारे पास आया है और उसी को हमारे वैज्ञानिकों ने प्रकृति से पाया है।

यह केवल आज से नहीं बल्कि बहुत प्राचीन काल से है, वैदिक काल से है। ऋषि-मुनियों का शोध और ज्ञान संस्कृत की अनेक पुस्तकों में भरा पड़ा है, जिसे यहां से विदेशों में जर्मनी और दूरदराज के देशों के विद्वानों ने उठाया है। उनमें ये तमाम शोध हैं कि किस प्रकार प्राकृतिक चिकित्सा की जा सकती है और प्रकृति से अनुसंधान करके कैसे विभिन्न प्रकार की चिकित्सा की जाती हैं। विभिन्न शोध कार्य, जो मानव के कल्याण के लिए थे, वे पहले से होते आये हैं। महोदय, मैं माननीय मंत्री श्री विलासराव देशमुख जी को बधाई देना चाहूंगी कि वह बहुत ही अच्छा, बहुत ही उपयोगी और जन-हितकारी विधेयक, The Academy of Scientific and Innovative Research Bill, 2011 लाए हैं।

मैं विधेयक और उसके उद्देश्यों का स्वागत करती हूं। सर, हम कई बार देखते हैं कि हमारे कई भारतीय छात्र और युवा विदेशों में विज्ञान और तकनीक के क्षेत्र में कार्य करने के लिए जाते हैं और अपना नाम कमाते हैं, अपनी पहचान बनाते हैं। इसका कारण क्या है? सर, उनमें योग्यता और प्रतिभा तो यहाँ भी उतनी ही है, लेकिन कभी इसी बात की है कि यहाँ उतने संसाधन संपन्न शिक्षण संस्थान नहीं हैं, उतनी सुविधाएं नहीं हैं, उतनी आमदनी नहीं है और कहीं कमियां भी हैं। इसलिए वे विदेश जाते हैं। जब यहीं ऐसी अकेडमीज की स्थापना होगी तो मैं निश्चित रूप से कह सकती हूं कि हमारे विद्यार्थियों को इसका पूरा लाभ इस देश में मिल सकेगा। सर, हमारे देश में ही हमारे पूर्व राष्ट्रपति डा. कलाम साहब स्वयं एक बड़े वैज्ञानिक थे। अभी श्री बसु की बात हुई जिन्होंने रेडियो का आविष्कार किया, श्री चितरंजन जिन्होंने जब रेल का इंजन बनाया तो लोगों में बड़ा भय व्याप्त हुआ। सर, अकसर कई बार अनुसंधान को कई चुनौतियों का भी सामना करना पड़ता है, लेकिन मैं इस विधेयक के संबंध में कुछ सुझाव देना चाहूंगी।

सर, क्लॉज 4 के (ग) में जहां लिखा है, प्राकृतिक विज्ञान, प्राणी विज्ञान, गणितीय विज्ञान, आयुर्विज्ञान, इंजीनियरी आदि, इसमें कृषि विज्ञान, अंतरिक्ष विज्ञान और सामुद्रिक विज्ञान को भी जगह दी जानी चाहिए क्योंकि ये विज्ञान के बहुत ही महत्वपूर्ण क्षेत्र हैं जिनमें कि वैज्ञानिक शोध की ज्यादा-से-ज्यादा जरूरत है। सर, इसके अलावा शिक्षण हेतु इस शिक्षण संस्थान में कम-से-कम छात्राओं का भी एक अनुपात होना चाहिए। इसमें 25-30

फीसदी छात्राओं को मौका दिया जाए। साथ ही समाज के कमजोर वर्ग के छात्रों को भी मौका मिले, लेकिन उसमें यह जरूर देखा जाए कि जो प्रतिभाशाली छात्र हैं, उन्हें छात्रवृत्ति देकर शिक्षा देने का पूरा मौका मिले।

सर, मैं मंत्री जी का ध्यान पेज 8 की ओर आकर्षित करना चाहूंगी। इसमें (झ) में लिखा है कि विश्वविद्यालय चार पारंगत वैज्ञानिक या शिक्षाविद, जिनमें से दो भारत से बाहर की प्रसिद्ध संस्थाओं से होने चाहिए, मैं कहना चाहूंगी कि इनमें दो प्रसिद्ध वैज्ञानिक और दो तकनीकी शिक्षाविद हों। इसके अलावा तीन सुप्रसिद्ध उद्योगपति या प्रौद्योगिकीविद का भी जिक्र है, मैं कहना चाहूंगी कि अगर उद्योगपति या प्रौद्योगिकीविद का भी जिक्र है, मैं कहना चाहूंगी कि अगर उद्योगपति हों तो ये उन्हीं में से लिए जाएं जिनकी कंपनियों में कोई इस तरह के शोध संबंधी कार्य किए गए हों। इसके अलावा चार पारंगत वैज्ञानिक या उत्कृष्ट वैज्ञानिक या वैज्ञानिक और औद्योगिक अनुसंधान परिषद की प्रयोगशालाओं के निदेशकों का जिक्र है। मेरा निवेदन इसमें यह है कि दो तो उत्कृष्ट वैज्ञानिक हों और दो औद्योगिक अनुसंधान परिषद की प्रयोगशालाओं के निदेशक हों ताकि एक संतुलन बने। साथ ही उन सबमें चार में से एक महिला हो। इसी तरह चयन समिति में भी महिलाएं होनी चाहिए। सर, इसमें जहां 12(4) (ख) में लिखा है कि चयन समिति पदधारी अध्यक्ष के कार्यकाल की समाप्ति से कम से कम तीन मास पूर्व अपनी सिफारिश प्रस्तुत करेगी, उसमें लिखा जाए कि उसे स्वीकृत समझा जाएगा ताकि वह पद खाली न रहे।

महोदय, आप बहुत उदार हैं। मुझे अंत में एक और बात कहने दें कि विशेष रूप से अनुसंधान के कुछ क्षेत्रों को प्राथमिकता दी जाए जैसे दवाओं का क्षेत्र। उसमें मस्ती, जीवनरक्षक दवाओं पर शोधक कार्य हो। दूसरे पर्यावरण को शुद्ध व स्वच्छ रखने के लिए शोध कार्य अधिक-से-अधिक हो कि कैसे हमारा भोजन, पानी, वायु और जलवायु सुरक्षित हो। यह जो ओजोन लेयर जैसे खतरे बढ़ गए हैं, इनकी तरफ भी हम ध्यान दें, ताकि मानव-जीवन सुरक्षित रह सके। इसी तरह प्रदूषण से हमें मुक्ति मिले और वर्षा का जल हमें कैसे उपलब्ध हो, इस पर शोध-कार्य हों। इसके अलावा जो समुद्र है, समुद्र का जल अगर वैज्ञानिक तरीके से मीठा किया जा सकता है, इसे पीने के योग्य बनाया जा सकता है, तो इस पर विशेष ध्यान दिया जाए, ताकि शुद्ध, स्वच्छ और मीठा पेयजल मिल सके और उसे पीने से हमारे लोग स्वस्थ रहें।

अंत में, मैं इस विधेयक को लाने के लिए बहुत आभार व्यक्त करती हूं। धन्यवाद।

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Thank you very much, Dr. Prabha Thakur.
Now, Shri D. Raja.

SHRI D. RAJA: Sir, I am one of those Members who wanted this Bill to be referred to a Select Committee. Since the Minister has assured us that there will be reservation for OBCs, SCs, STs and all other categories, I rise to support this Bill. I urge upon the Minister to see to it that whatever he has assured us on the Floor of the House must become part of this legislation. We have been witnessing a distressing trend in our country. Whenever we create institutions of national importance,

6.00 P.M.

there is a tendency to get rid of reservation. Even the approach to Twelfth Five Year Plan talks about the PPP model in education, in health. Even the Government allows PPP model institutions. I insist, there should be reservation in all these institutions. Even though this Institution is supposed to be a self-financed one, it draws huge grants and other monies from various Departments of the Government. I think, there is a justification for demanding reservation, and it should be ensured. And whatever you have promised should become part of this legislation. This is number one, Sir.

Secondly, it is a fact that Academy of Scientific and Innovative Research has been functioning with the resolution of Cabinet even when the Bill for its setting up is yet to be passed by the Parliament. If I am wrong, the Minister can correct me. Sir, the Institution has been functioning, but there is urgency to get this Bill passed. Here, I would like to point out that the Director General, CSIR, and the Secretary, DSIR, should have exercised restraint in fully making the Academy operationalised, and also in registering the candidates for the award M.Tech, Ph.D certificates before finally absorbing them in CSIR Lab. In utter disregard to recruitment rules in vogue for such appointments, and also in violation of Constitutional obligations for reservations, as many as 52 candidates have been absorbed. This is my figure; I may stand corrected. Sir, 52 candidates have been absorbed, and out of these 52 candidates, the total number of reserved candidates is a meagre 13; 12 OBCs and one ST. Only 12 OBCs and one ST! No SC at all! In all the laboratories, not a single candidate belonging to SC has been appointed, which is a serious matter inviting immediate attention and remedial measures. The Minister will have to look into it.

Sir, the Statement of Objects & Reasons says, "The establishment of proposed Academy of Scientific and Innovative Research would substantially increase research in interdisciplinary, transdisciplinary areas."

"It is expected that Academy would produce from 5th year onwards 1,000 PhDs in science and technology and 120 PhDs in engineering every year". The same Statements of Objects and Reasons says that the proposed Academy will "conduct courses in inter-disciplinary and multi-

disciplinary areas covering natural sciences, life sciences, mathematical and computational sciences, engineering, etc., and create an ambience for learning and scholarship in advanced science and technology". Here, I agree with many of our colleagues who have said that we should concentrate on basic research in the mining and mineral sector. That is one area which requires serious attention. Then we will have to concentrate on our research in the agricultural sector. Of late, we have only one agricultural scientist, Dr. Swaminathan. Wherever we go we have to refer to only Dr. Swaminathan. Where are the other scientists in the agricultural sector? ...(*Time Bell rings*)...

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Yes, Rajaji, please conclude.

SHRI D. RAJA: Then there is the national safety and security areas. These are the areas we need to concentrate. I agree with one of my colleagues, Prof. Kurien, when he said that brain-drain was going on. Many of those who complete their studies in the IITs leave the country and it is a loss for the country. If we can provide good conditions, these IITians would stay back and work for the country.

Sir, our country is not in dearth of scientific personnel. In fact, the Indian society is emerging as a modern society, a society based on knowledge. We have a proud legacy. As many Members have pointed out, 'Zero' is our pride. It is India's contribution to the world. We hear about Raman Effect, Saha Equation and so on. These are things of pride. ...(*Interruptions*)...

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Please, less noise. ...(*Interruptions*)... What is this? Please.

SHRI D. RAJA: When I was a student I was overwhelmed by the personality of Homi Bhabha.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Rajaji, please conclude.

SHRI D. RAJA: When Homi Bhabha died in a tragic accident, that was the saddest day of my life. We lost such an eminent scientist. What I am trying to say is that India has the potential to produce scientists and more researchers. But India lacks the will and the Government in its pursuit of the neo liberal policies, somewhere down the line, undermines our own potential and fails to promote our own talent and skill. If this Institute fills up that gap, it can serve the nation in a better way. I hope

that the Minister would keep that perspective in mind when he gets the Bill passed. Thank you very much.

THE VICE-CHAIRMAN (PROF. P.J. KURIEN): Thank you, Mr. Raja. Mr Minister.

SHRI VILASRAO DESHMUKH: Sir, I thank all the Members who have participated in the debate, Shri Shreegopal Vyas, Shri P. Rajeeve, Shri N. K. Singh, Shrimati Vasanthi Stanley, Dr. Janardhan Waghmare, Shri Baishnab Parida, Dr. Ganguly, Dr. Barun Mukherji, Shri Bal Apte, Shri Ram Gopal Yadav, Shri Bandopadhyay, Dr. Prabha Thakur, Shri Raja and, of course, Prof. P. J. Kurien.

Sir, the discussion on this particular Academy Bill was very excellent and, by and large, the consensus of the House, which I could gather, is that they are all in favour of this Bill. But there are certain apprehensions. The basic apprehension raised by many of the Members is regarding reservation. When this was brought to my notice, immediately, we moved a Government amendment to make it very clear that this institution will have reservation as per the Universities Act. There should not be any confusion about it. The UPA Government works for the aam admi. We are committed to the weaker sections of the society.

श्री रुद्रनारायण पाणि: फिर अमेंडमेंट की आवश्यकता क्यों हुई?

SHRI VILASRAO DESHMUKH: This amendment has been brought to make it more clear. There was a provision. But some people apprehended that we may take advantage of Section 4 of the Universities Act. Just to make it more clear and more concrete, we have already moved a Government amendment. So far as reservation is concerned, your sentiments and our sentiments are one. So, please do not have any apprehension in your mind. This is the commitment of the UPA Government. We will see that this Academy observes each and every rule which is applicable to the weaker sections of the society. This is one very important point which I want to clarify. I hope I have addressed the doubts raised by many of the hon. Members.

So far as this Academy is concerned, many questions have been asked. It is very difficult for me, in this short span of time, to reply to each and every hon. Member's point. They have made very valuable suggestions. It will be very difficult for me to refer to each and every hon. Member. The hon. Member, Shri Shreegopal Vyas, who has initiated the debate, was having an apprehension that why

this particular Academy was needed and whether this will have any adverse impact on the universities which are already doing research. I can assure this House that there would not be any adverse impact on the universities where research is on.

(MR. DEPUTY CHAIRMAN in the Chair)

We will have only those subjects which are not taught in academic universities. I would like to give this assurance to this House. This is only for innovation. As Shri N.K. Singh has already said, this promise was made in the President's Address also. So keeping that promise in mind, we have already started this Academy, as you have rightly said, with the approval of the Cabinet and students have been admitted to it. Then immediately, we had moved the Bill in Parliament which went to the Standing Committee. That is why it has taken some time. It is not in our hands. We have again brought it for the final approval of Rajya Sabha. We have the CSIR ...*(Interruptions)*...

SHRI M. RAMA JOIS: Sir, my name has not been called.

MR. DEPUTY CHAIRMAN: Do you want to seek clarification?

SHRI M. RAMA JOIS: Sir, I have to move an amendment.

MR. DEPUTY CHAIRMAN: You can do it after that. I will call you. I have not put it to vote.

SHRI VILASRAO DESHMUKH: Sir, we have 37 different labs spread over the whole country. We are using the infrastructure which is available in those laboratories. The best scientists are working in those labs. It is not that the Academy will function at one single point. Students will be admitted in 37 different labs which are spread over the whole country. Every corner of the country will have access to this Academy and the students will be able to avail of the facilities available over there. We will have a national examination because we want the best talent. Many hon. Members have said in their speeches that nobody would like to come for research; all the talented students will go in for Medical, Engineering, IITs, IAS, IPS; and very few students would be attracted to research. As you rightly said, the main idea of having this Academy is to stop brain-drain. Why are people going to foreign universities? It is because they have got world-class facilities over there. We are

going to create that kind of a situation and those kinds of facilities in this Academy so that the brain-drain stops and the best talent of Indian students can be attracted to do research. The country is growing at seven to eight per cent of GDP. If you want to grow more, we have to have more scientists with us. We are also introducing the Food Security Bill. If you want to have more foodgrains to be produced in the country, we should have research in that particular area ...*(Interruptions)*...

श्री रुद्रनारायण पाणि: माननीय मंत्री जी, यह फूड सिक्योरिटी बिल कब इंट्रोड्यूस होने वाला है?

श्री विलासराव देशमुख : हो जाएगा।

श्री रुद्रनारायण पाणि : कब होने वाला है?

श्री उपसभापति: आप इसको और उसको यहां क्यों उलझाते हो। ...*(व्यवधान)*...

श्री विलासराव देशमुख : यह बहुत जल्द इंट्रोड्यूस होगा। अब हम साइंस एंड टेक्नॉलोजी की बात कर रहे हैं। अगर एग्रीकल्चर को बढ़ाना है तो हमें एक अच्छे साइंटिस्ट की और रिसर्च की आवश्यकता है, यह मैं यहां पर कहना चाहता हूँ। All these particular issues have been taken into consideration, and that is why, this Academy has been established.

Sir, it is difficult for me to go into the suggestions of each and every hon. Member right now. I will try my best to give my reply in writing to each Member so that they will be happy that the Government has considered their suggestions, and whatever is possible, we will try to implement during the course of time. I once again thank all the hon. Members, and I appeal to the House to kindly pass this Bill.

MR. DEPUTY CHAIRMAN: Now, Shri M. Rama Jois, Dr. V. Maitreya, Shri Pramod Kureel and Shri Moinul Hassan have moved an Amendment. Mr. Jois, are you pressing for it?

SHRI M. RAMA JOIS: Sir, I have given an amendment, In terms of rule 125, "Any member may, if the Bill has not already been referred to a Joint Committee of the Houses, but not otherwise, move as an amendment that the Bill be referred to a Select Committee and, if such motion is carried, the Bill shall be referred to a Select Committee, and the rules regarding Select Committees on Bills originating in the Council shall then apply." Now, this is the second such occasion, the first one was

when the Commercial Division of High Courts Bill was referred to the Select Committee under the same rule, and no discussion took place on the Bill itself. Now, we are putting the cart before the horse. What is the reason why we want that this should be done? In fact, I have not had an opportunity to explain why we are pressing for it...

MR. DEPUTY CHAIRMAN: Now you can go ahead.

SHRI M. RAMA JOIS: As far as this Bill is concerned, though it is called an Academy, the President of the Council of Scientific and Industrial Research will nominate the Chancellor of this Academy. The head of the Academy is called the Chancellor. So, the Chancellor of a statutory university is to be appointed by the head of a Society registered under the Societies Registration Act, 1860, which is peculiar. The second thing is that if we look into the functions of the Academy, it includes conferment of degrees, and conducting research is also a part of the functions of the Academy. Now there are already so many universities in this field, and this Academy is to be brought over and above all of them, in which case there will be a conflict between the working of the Universities and the Academy. This is merely duplication, and therefore, it is, virtually, a hybrid law. It will be difficult to make out whether a particular institution is a university or an academy.

Sir, as far as Universities are concerned, I shall refer to Entry 44 of the Union List which says, "Incorporation, regulation and winding up of corporations, whether trading or not, with objects not confined to one State, but not including universities." So, universities have been expressly excluded in the Union List. Then, Entry 32 in the State List states, "Incorporation, regulating and winding up of corporations, other than those specified in List I", which means that they are specially included in the Union List. Further, I would invite the attention of the House to certain other provisions of the Bill. Clause 20 says that the Chairperson of the Board shall be the Chancellor of the Academy. The Chancellor is an expression generally used only in the context of a university. And, clause 12 states, "The Chairperson shall be appointed by the President of the Council of Scientific and Industrial Research." Now, the Council of Scientific and Industrial Research is a society registered under the Societies Registration Act of 1860. Now, the head of a non-statutory body is going to appoint the Chancellor of the Academy! Now, let us look at clauses 28 and 29. Normally, expressions like

'Statutes', 'Ordinances', etc. are used only in the case of universities. But Section 28 says, "(1) The Statutes of the Academy shall be enacted by the Board. (2) Without prejudice to the provisions contained in sub-section (1), the Senate may make recommendations for enactment of Statutes to the Board" and so on. Then, come to Section 29 which says, "Subject to the provisions of this Act, the Statutes may provide for all or any of the matters considered necessary by the Board for functioning of the Academy within the framework of this Act, including the following matters, namely:- (a) the conferment of degrees and diplomas; (b) the constitution, powers and functions of the Board of Studies; (c) the tuition fee and other fees to be charged; (d) the institution of fellowships, scholarships, medals and prizes; (e) the term of office and the method of appointment of officers of the Academy", and so on. Then, I come to Section 30 which says, "(1) Subject to the provisions of this Act and the Statutes, the Ordinances of the Academy may provide for all or any of the following matters, namely:- (a) the admission of the students; (b) the courses of study; (c) the conditions under which students shall be admitted; (d) conditions of award of the fellowships, scholarships, medals and prizes; (e) condition and mode of appointment and duties of examining bodies, examiners and moderators; (f) the conduct of examinations; appointment of Professors, all these things are there. In the Statement of Objects and Reasons, it is said that the object of the Academy is to produce 1000 Ph.Ds. Then, what is it that universities are doing? It is the job of the universities to grant Ph.Ds. That function is being given to the Academy. The pith and substance of this law which relates to university, is completely outside Entry 44 of the Union List. I am raising an objection in the beginning itself so that if the matter goes to the Select Committee, they consider whether there should be another Academy that takes over the functions of all the universities in the country. The Supreme Court, in the Chhattisgarh case and the Aligarh Muslim University said that the function of conferring degrees is that of the universities under the scheme of law in our country and that function is being given to an academy and the Chancellor of that academy is being appointed by the President of a society. There are so many anomalies here. Therefore, the matter must be considered very coolly. Otherwise, what would happen is, we would act in haste and hurry in leisure. That is what is going to happen. My humble submission is that, having regard to the pith and substance, the function of the universities has been handed over to this Academy and 'university' is

State subject and it is completely excluded under Entry 44 of the Union List. This being the position, this matter should be heard first. When a preliminary objection is raised, that should be heard first. So, my humble submission is this. Let the matter go to the Select Committee. Let the Select Committee consider it and suggest any modifications, if they want to. Harmonisation between this Academy and the Universities is a serious matter and it should be considered seriously.

MR. DEPUTY CHAIRMAN: Well, the discussion is over. We are considering the amendments now. Yes, the Minister of Parliamentary Affairs wants to say something.

SHRI M. RAMA JOIS: For the purpose of appointment of Professors, Readers...

MR. DEPUTY CHAIRMAN: Let the Minister reply to it.

THE MINISTER OF PARLIAMENTARY AFFAIRS (SHRI PAWAN KUMAR BANSAL): Sir, I would like to submit that this Bill went to the Department-related Parliamentary Standing Committee. Since 1991, we have the system that all the Bills which are introduced in any of the two Houses go to the subject-related Standing Committee. This Bill went to the Standing Committee. The Standing Committee has Members from both the Houses. The Standing Committee discussed the Bill and the Report of the Standing Committee was considered by the Government. Thereafter, this Bill was brought. I may be permitted to say that there was only one objection raised in the other House.

Sir, when I happened to somehow pilot this Bill, I allayed the fear that there could be some attrition of researchers from universities. That fear was allayed. The fears expressed by hon. Members from the other side were allayed by the very senior hon. Member from the other side. Then, after consideration of that, this Bill was passed.

Sir, the hon. Member is very learned with a very vast experience. He also knows that we have institutions called the Indian Institute of Technology. This Academy is also on the same lines. I agree with the Constitutional provisions which he read; there is no doubt about that. Nobody can dispute on that. But, the fact remains, Sir, that the IITs are already there and more and more IITs are being created. This Parliament is accepting those. This Academy would work on the hub and spokes of that. The CSIR, which is a world-renowned institution, has different laboratories all over the country;

they are also working. It is nothing very big that is being created; it is actually to bring about a synergy among various laboratories where scientists are working; those and at the CSIR headquarters would work, as I said, as the hub and spokes; this is something which I feel was welcomed by the entire House. I would appeal to the hon. Member to withdraw his amendment. His very valid points are taken note of. We have the system; it is something for the larger interest of the scientific community so that they have a greater space to carry out their research, carry out front end research. Therefore, I would appeal to the hon. Member to withdraw his amendment. The Bill has been thoroughly considered at the Standing Committee, which has Members from the other House and this House.

Sir, the Select Committee process was actually an earlier one. He was referring to the Commercial Divisions in the High Courts. In a particular case, you may some times take it. But, that is not the practice. That is not the routine. In two cases, this House has done that.

Since a large amount of business is pending before the Standing Committees, before the two Houses, I would urge the hon. Member to withdraw his amendment. I would also appeal to the House to consider this Bill and pass it.

SHRI M. RAMA JOIS: I have quoted rule 125 light-heartedly...

MR. DEPUTY CHAIRMAN: He has not said on that. He appreciated your points.

SHRI M. RAMA JOIS: See the reasons. That should be considered by the Select Committee. It is a serious matter because you have created. ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: He has not said what you have said is not relevant. He said that it is relevant; since there are IITs that are functioning on the same lines. ...*(Interruptions)*...

श्री रुद्रनारायण पाणि: क्या आई.आई.टी. में चांसलर नाम की कोई पोस्ट नहीं है?

MR. DEPUTY CHAIRMAN: They also confer degrees.

SHRI PAWAN KUMAR BANSAL: There is the Board of Directors there, they confer degrees...

SHRI TARUN VIJAY: Sir, while I congratulate the Minister for bringing the Bill which strives for

excellence in the area of science and technology, my humble suggestion is to name it after Aryabhata. Aryabhata was one of the greatest innovators that India has ever produced. This was recognized by Smt. Indira Gandhi also and a satellite was named after Aryabhata. Can the hon. Minister name this Academy after Aryabhata -- the Aryabhata Academy of Science and Technology? Thank you.

श्री म. रामा जोयिस: मैंने यह सोच-समझकर दिया है।

श्री उपसभापति: आपने सोच-समझकर दिया है लेकिन ...(व्यवधान)...

SHRI M. RAMA JOIS: Let it be rejected, but I move my amendment. I move:

"That the Bill to establish an Academy for furtherance of the advancement of learning and prosecution of research in the field of science and technology in association with Council of Scientific and Industrial Research and to declare the institution known as the Academy of Scientific and Innovative Research, to be an institution of national importance to provide for its incorporation and matters connected therewith or incidental thereto, as passed by Lok Sabha, to be referred to a Select Committee of the Rajya Sabha consisting of the following members, namely (names to be given at the time of moving the motion):-

with instructions to report by the last day of the first week of the next Session of the Rajya Sabha."

The question was put and the motion was negatived.

MR. DEPUTY CHAIRMAN: I shall now put the motion to vote.

The question is:

"That the Bill to establish an Academy for furtherance of the advancement of learning and prosecution of research in the field of science and technology in association with Council of Scientific and Industrial Research and to declare the institution known as the Academy of Scientific and Innovative Research, to be an institution of national importance to provide for its incorporation and matters connected therewith or incidental thereto, as passed by Lok Sabha, be taken into consideration.

The motion was adopted.

MR. DEPUTY CHAIRMAN: I shall now take up the clause-by-clause consideration of the Bill.

Clauses 2 to 6 were added to the Bill.

MR. DEPUTY CHAIRMAN: In Clause 7, there are two amendments by Shri S.S. Ahluwalia and Shri Pramod Kureel. Mr. Kureel, are you moving your amendments?

SHRI PRAMOD KUREEL: No, Sir.

Clause 7 was added to the Bill.

MR. DEPUTY CHAIRMAN: In Clause 8, there are two amendments by Shri S.S. Ahluwalia and Shri Pramod Kureel. Mr. Kureel, are you moving your amendments?

SHRI PRAMOD KUREEL: No, Sir.

Clause 8 was added to the Bill.

MR. DEPUTY CHAIRMAN: In Clause 9, there are two amendments (No. 1 and 2) by the hon. Minister.

Clause 9 - Academy open to all castes, creed, race or class.

SHRI VILASRAO DESHMUKH: Sir, I move:

That at page 7, for line 7, the following shall be substituted, namely:-

"(2) The Academy shall make"

That at page 7, line 11, after the word "citizens" the following shall be inserted, namely:-

"and any exemption from making such reservation under the proviso to clause (b) of section 4 of the Central Educational Institutions (Reservation in Admission) Act, 2006 shall not be applicable to this Academy."

The questions were put and the motions were adopted.

Clause 9, as amended, was added to the Bill.

Clauses 10 and 11 were added to the Bill.

MR. DEPUTY CHAIRMAN: In Clause 12, there are two amendments by Shri S.S. Ahluwalia and Shri Pramod Kureel. Mr. Kureel, are you moving your amendments?

SHRI PRAMOD KUREEL: No, Sir.

Clause 12 was added to the Bill.

Clauses 13 to 33 were added to the Bill.

MR. DEPUTY CHAIRMAN: In Clause 34, there are two amendments by Shri S.S. Ahluwalia and Shri Pramod Kureel. Mr. Kureel, are you moving your amendments?

SHRI PRAMOD KUREEL: No, Sir.

Clause 34 was added to the Bill. Clauses 35 to 38 were added to the Bill. Clause 1, the Enacting Formula and the Title were added to the Bill.

SHRI VILASRAO DESHMUKH: Sir, I move:

That the Bill, as amended, be passed.

The question was put and the motion was adopted.

MESSAGE FROM THE LOK SABHA

Constitution of Committee on Welfare of Other Backward Classes

MR. DEPUTY CHAIRMAN: Now, there is message from the Lok Sabha.

SECRETARY-GENERAL: Sir, I have to report to the House the following message received from the Lok Sabha, signed by the Secretary-General of the Lok Sabha:-

"Sir,

I am directed to inform you that Lok Sabha, at its sitting held on Wednesday, the 21st December, 2011, adopted the annexed motion regarding constitution of Committee on "Welfare of Other Backward Classes (OBCs).

2. I am to request that the concurrence of Rajya Sabha in the said motion, and also the names of the members of Rajya Sabha appointed to the Committee, may be communicated to this House.