

of science, spirit of inquiry, the ability to encourage youngsters to go for conferences and publish in journals, which has to come together if you want to make these truly the institutions of national importance which is what they deserve. I am sure that these suggestions, if the hon. Minister takes them into account, will do a wonderful job of ensuring that these institutions, which the UPA Government had established and the NDA Government is taking forward, will become world class. I am sure the Government will fulfill its promises made during the bifurcation of Andhra Pradesh that they will make these institutions world class. Our students who will be proud of the investment and the commitment that our Governments and all of us have put in to create a new era of science and education and research in the country. Thank you, Sir.

MR. DEPUTY CHAIRMAN: Prof. Rajeev Gowda, you have made a very valuable speech with intellectual inputs.

Now, message from the Lok Sabha.

MESSAGE FROM LOK SABHA

The Indian Institute of Information Technology (Amendmen) Bill, 2017

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:

"In accordance with the provisions of rule 96 of the Rules of Procedure and Conduct of Business in Lok Sabha, I am directed to enclose the Indian Institutes of Information Technology (Amendment) Bill, 2017, as passed by Lok Sabha at its sitting held on the 26th July, 2017."

Sir, I lay a copy of the Bill on the Table.

GOVERNMENT BILLS

The National Institutes of Technology, Sceience Education and Research (Amendment) Bill, 2017 — *Contd.*

श्री महेश पोद्दार (झारखंड): उपसभापति महोदय, मुझे खुशी है और गर्व है कि जिस profession से मैं आता हूँ, मुझे उस विषय पर आज 'कारगिल दिवस' पर मौका दिया गया। इस बिल

[श्री महेश पोदार]

के द्वारा दो संस्थानों को संवैधानिक स्वीकृति देने का प्रस्ताव है, जिसका मैं समर्थन करता हूँ। इससे पहले पांच IISER थे और अब दो और जुड़ रहे हैं। Technology एक ऐसा विषय है, जिसमें पढ़ाई के अलावा अनुभव, प्रयोग और रिसर्च भी बराबर का स्थान रखते हैं। यदि केवल पढ़ाई हो और वह अनुभव में न आए, उस पर रिसर्च न हो और उसे आगे नहीं ले जाए, तो उसके रास्ते बंद करने का अधिकार किसी भी समाज को नहीं है।

इसमें कोई शक नहीं है कि हमें अपने इंजीनियरों पर गर्व है, जिन्होंने विदेशों में अपनी पहचान बनाई है और इतने प्रख्यात हो गए हैं कि अमरीका के राष्ट्रपति भी अपने युवाओं को पढ़ाई की तरफ प्रेरित करने के लिए भारतीय इंजीनियरों का भय दिखाते हैं।

महोदय, देश में रीजनल इंजीनियरिंग कॉलेजेज़ थे और जब मैं छात्र था तब मैं इंजीनियरिंग कॉलेज में एडमिशन के लिए कोशिश कर रहा था, तो मुझे याद है कि अलग-अलग रीजनल कॉलेजेज़ में अलग-अलग परीक्षाएं होती थीं और छात्र बेचारा यहां से वहां दौड़ता रहता था, लेकिन इन सबको मिलाकर एक NEET की सुविधा बना दी गई है। उससे आगे जाते हुए और उसके उद्देश्यों को और आगे ले जाते हुए हमने नई चीज़ National Institutes of Technology, Science Education and Research बनाया है। जिसके पीछे मूल उद्देश्य है कि क्वालिटी एजुकेशन हो और

(उपसभाध्यक्ष (श्री बसावाराज पाटिल) पीठासीन हुए)

साइंस हो तथा इंजीनियरिंग को मात्र इंजीनियरिंग न रखकर, इसे साइंस के तौर पर रिसर्च ओरिएंटेड बनाया जाए।

महोदय, इंजीनियरिंग साइंस का एक छोटा अंग है और अनुसंधान की सीमाएं अनन्त हैं। जिस व्यक्ति में अनुसंधान की जब ललक पैदा हो जाती है, तो वह अपना पूरा जीवन इस कार्य में लगा देता है और उसको बहुत सारी फिजिकल सुख-सुविधाओं का भी विचार नहीं होती है तथा उसके लिए उनके देश की सीमाएं मायने नहीं रखती हैं। इस सरकार का और हमारा यह धर्म है कि ऐसे लोगों को हम अपनी सीमाओं में रख सकें और ऐसी सुविधाएं दे सकें और हम अपने यहां ही उनको एक मौका दें, ताकि वे हायर रिसर्च और हायर एजुकेशन पर काम कर सकें और हम ब्रेन ड्रेन को रोक सकें।

हमारे देश में National Institute of Technology का विस्तार हुआ और मुझे खुशी है कि चंडीगढ़, अंडमान-निकोबार आदि एक-दो जगहों को छोड़ दिया जाए, तो सारे राज्यों में कोई न कोई National Institute बन गए हैं। इनके करीब-करीब एक लाख छात्र शिक्षा ले रहे हैं। वैसे मेरी जानकारी के अनुसार पहला इंजीनियरिंग कॉलेज 1794 में गिंडी में बना था और उसके बाद रुड़की इंजीनियरिंग कॉलेज 1847 में तथा शिवपुर कोलकाता में और पुणे में 1856 में बना था। इस तरह से हमारी इंजीनियरिंग की ग्रोथ तो बहुत हुई है, लेकिन ग्रोथ में एक-दो चीज़ें हुई हैं।

5.00 P.M .

जो कि एक चिंता का विषय भी है। यदि हम राज्यों को देखें, तो आंध्र प्रदेश में, जहाँ हम तिरुपति में एक नया NITSER बना रहे हैं, चाहे, वे सरकारी हों या प्राइवेट हों, वहाँ टोटल 227 इंजीनियरिंग

colleges हैं। दूसरी तरफ, यदि हम बिहार जैसे बड़े राज्य को देखते हैं, तो वहाँ पर ऐसे मात्र 8 colleges हैं। ये जो आंकड़े हैं, इनमें हम यह भी देख रहे हैं करीब 400 इंजीनियरिंग colleges बंद हो चुके हैं। चूँकि वे viable नहीं थे, या उनकी शिक्षा उस स्तर की नहीं थी, या वहाँ के लोगों को नौकरियाँ नहीं मिल रही थी, इसलिए ऐसा हुआ। इसमें तमिलनाडु राज्य भी काफी अच्छा रहा है। इसमें करीब 129 colleges हैं, महाराष्ट्र में करीब 133 colleges हैं, लेकिन अधिकांश राज्यों में ऐसी स्थिति हो गई है कि वहाँ पर बहुत सारे इंजीनियरिंग colleges हो गए हैं। उन राज्यों में, दूसरे राज्यों के बच्चे आते हैं, लेकिन जब वे अपने यहाँ पर वापस जाते हैं तो उनको नौकरियाँ नहीं मिलती हैं। इसलिए हो सकता है कि ये NITSER, जो अधिक बन रहे हैं, उनमें जो अच्छे बच्चे होंगे, वे कुछ रिसर्च की तरफ भी आकर्षित होंगे और उनमें भी काम करना शुरू करेंगे।

महोदय, इंजीनियरिंग college की बात करें तो शुरू में हमारे देश में सारे इंजीनियरिंग colleges सरकारी बने थे, लेकिन 1960 के दशक में कर्णाटक जैसे राज्य में प्राइवेट इंजीनियरिंग colleges बनने चालू हुए और कर्णाटक के इंजीनियरिंग colleges आज भी बहुत popular हैं। मैंने भी अपनी इंजीनियरिंग वहीं से की है और हम गर्व के साथ कह सकते हैं कि वहाँ के प्राइवेट इंजीनियरिंग कॉलेज के छात्र किसी भी सरकारी या अन्य संस्थानों से मिली स्पर्धा को एक चुनौती के रूप में स्वीकार करते हैं और अच्छा रिजल्ट देते हैं।

महोदय, इन NITSER में प्रस्ताव है कि एम.एस. की डिग्री, जो कि विदेशों में मिलती थी, एम.एस., पीएच.डी., Post doctoral, के अलावा, इंजीनियरिंग के अलावा science management इत्यादि में भी doctorate की सुविधाएँ दी जाएंगी, अर्थात् हम higher education के सेंटर्स बना रहे हैं। भविष्य के लिए यह हमारा एक अच्छा निवेश है।

महोदय, सारी दुनिया में higher research के जितने संस्थान हैं, वे व्यापार जगत से भी बहुत closely जुड़े रहते हैं। हमारे यहाँ अब तक इस चीज़ की कमी महसूस की जा रही थी, लेकिन मुझे विश्वास है कि जब higher education के ये इंस्टीट्यूट्स बनेंगे, तो लैब से लेकर इंसान को फायदे पहुंचाने तक में यह interaction, इंडस्ट्री के साथ मेल-जोल काफी काम आएगा। IISER आंध्र, तिरुपति 20 अप्रैल को चालू तो हो गया, यद्यपि इसमें कोई शक नहीं है कि उसमें कुछ-कुछ दिक्कतें हैं, लेकिन इस वर्ष छात्रों की संख्या, जैसा कि बताते हैं, उसके अनुसार 75 तक बढ़ेगी और आंध्र के विस्थापन के बाद, इतने सारे इंजीनियरिंग कॉलेज होने के बाद भी सरकार ने जो इस संस्थान को वहाँ पर स्थापित किया है, यह उनके द्वारा किए गए वायदे को पूरा करने के लिहाज से बहुत बड़ा कदम है।

महोदय, दूसरा, जो ओडिशा का संस्थान है, ओडिशा के उस संस्थान में भी पढ़ाई चालू हो गई है। भारत में बहुत ही जल्द Indian Institute of Technology या Indian Institute of Science की तरह, ये जो अभी नये पाँच और दो इंस्टीट्यूट्स जुड़ रहे हैं, ये सात इंस्टीट्यूट्स हमारे लिए गर्व के संस्थान होंगे। मेरे इन्हीं शब्दों के साथ आप सभी का बहुत-बहुत धन्यवाद।

श्री हरिवंश (बिहार): धन्यवाद उपसभाध्यक्ष जी, आपने मुझे बोलने का मौका दिया है। The National Institutes of Technology, Science Education and Research (Amendment) Bill, 2017, संक्षेप में मैं NITSER Act, 2017 का समर्थन करता हूँ। यह The National Institute of

[श्री हरिवंश]

Technology, Science Education and Research (Amendment) Bill, 2017, NITSER के दूसरे शेड्यूल में दो संस्थानों, इंस्टीट्यूशंस को जोड़ेगा। Indian Institute of Science Education and Research, Tirupati, Andhra Pradesh और दूसरा, Indian Institute of Science Education and Research बरहामपुर, ओडिशा। इस तरह NITSER Act के तहत दो महत्वपूर्ण इंस्टीट्यूशंस हैं, दो तरह के इंस्टीट्यूशंस हैं। पहला नेशनल इंस्टीट्यूट ऑफ टेक्नोलॉजी, निट्स और दूसरा IISER, Indian Institute of Science Education and Research. आज भारत में इकतीस निट्स हैं, जिनमें ऑल इंडिया इंजीनियरिंग एग्जामिनेशन के परिणाम के तहत एडमिशन होता है। यह सीबीएसई के द्वारा कंडक्ट होता है। इसे जोड़कर सात IISER होंगे। 2005 में तत्कालीन प्रधान मंत्री जी की Scientific Advisory Council के चेयरमैन प्रो. सी.एन.आर.राव ने रिकमंडेशन के तहत इसे कहा था कि Indian Institute of Science Education and Research, Indian Institute of Science बेंगलुरु की तर्ज पर डेवलप किए जाएं। इंडियन इंस्टीट्यूट ऑफ बेंगलुरु की तर्ज पर डेवलप किए जाएं। सर, मैं यह मानने वाले लोगों में हूँ कि संस्थाएं ही देश और समाज की नियति तय करती हैं, उसको आगे ले जाती हैं। ये जो हमारा भविष्य गढ़ने वाली संस्थाएं हैं, वे किन चुनौतियों का सामना कर रही हैं? यह मैं इस अवसर पर बताना चाहूंगा। पहली चीज बजट का प्रोविजन बढ़ना चाहिए, बाकी चीजें कट कर के अगर हम अपने भविष्य को निखारने के लिए, हम भविष्य में निवेश कर सकें, तो यह काम होना चाहिए। हालांकि NITs का बजट 2016-17 में रिवाइज्ड एस्टीमेट्स से 19.7 परसेंट बढ़ गया, यानी 2,875 करोड़ रुपए से 3,440 करोड़ रुपए वर्ष 2017-18 का बजट रहा, यह स्वागत योग्य है, परन्तु इसी अनुपात में IISER का एलोकेशन 16.7 परसेंट घटा, 2016-17 का एस्टीमेट 780 करोड़ रुपए से घट कर 2017-18 में 650 करोड़ रुपए रह गया। मेरा अनुरोध होगा कि ऐसी संस्थाओं को मजबूत बनाने के लिए हमें फाइनेन्शियल बजट से कहीं किसी ढंग से कमी नहीं रहने देनी चाहिए। दूसरी चीज, NITs और IISER को 2016-17 के HRD के बजट का 5 परसेंट एलोकेशन हुआ था। मैं आग्रह करूंगा कि यह एलोकेशन बढ़ाया जाना चाहिए। इसके साथ ही अनेक महत्वपूर्ण कमेटियों ने इन संस्थाओं को वर्ल्ड क्लास की संस्थाएं बनाने के लिए अनेक महत्वपूर्ण सुझाव दिए हैं। इसमें स्टैंडिंग कमेटी ऑन ह्यूमन रिसोर्सेज और दूसरे एक्सपर्ट्स की कमेटीज की रिपोर्ट्स हैं, उनमें कुछ चीजें बहुत प्वाइंटेड ढंग से रेखांकित की गई हैं। इनमें पहली चीज शॉर्टेज ऑफ टीचर्स है। वर्ष 2013 में एचआरडी ने पाया था कि NITs में 45 परसेंट टीचिंग पोस्ट्स वेकेंट थीं। इनके पदों को बढ़ी संख्या में बढ़ाए जाने की जरूरत है। आप जो दुनिया में बेहतर इंजीनियर पैदा करना चाहते हैं, अगर पढ़ाने वाले अच्छे टीचर्स नहीं होंगे, तो आपके इंजीनियर कैसे निकलेंगे? कुछ ही दिनों पहले यह टिप्पणी अनेक जानी-मानी संस्थाओं से पढ़ने को मिली कि किस तरह के हमारे इंजीनियर्स अनएंप्लॉयड हैं?

सर, मैं दो मिनट और लेकर अपनी बात खत्म करूंगा। इन इंस्टीट्यूशंस के परफॉर्मेंस को इवेल्यूएट करने के लिए काकोडकर कमेटी ने जो रिपोर्ट दी थी, उस पर काम होना चाहिए। तीसरी चीज, IISER में इंटरडिसिपिलिन नॉलेज को इंटीग्रेट करने का सुझाव आया था, यह स्टैंडिंग कमेटी ने दिया था, उस पर काम होना चाहिए। चौथी चीज, admission process of IISER, स्टैंडिंग कमेटी ने सुझाव दिया था कि IISER में एडमिशन प्रोसेस को हम कैसे बदलें, उस पर भी काम होना चाहिए। सर, मैं दो सुझाव देकर अपनी बात खत्म करना चाहूंगा। मैं NITs के आंकड़े देख रहा था, पहली झलक में

मुझे लगा कि पटना और इलाहाबाद, बिहार और उत्तर प्रदेश जो इतने बड़े राज्य हैं, उनमें सिर्फ दो संस्थाएं NITs की हैं और सात IISER में ये जो दो संस्थाएं हम जोड़ रहे हैं, इनमें से एक भी संस्था उत्तर प्रदेश और बिहार में नहीं है। हमारे माननीय प्रधान मंत्री जी, जो राज्य कई चीजों में पीछे छूट गए हैं, उनको आगे बढ़ाने की बात करते हैं, तो मेरा आग्रह होगा कि ऐसी संस्थाएं वहां बढ़ाई जाएं। अंतिम सुझाव, सर, अच्छे टीचर्स, जब तक बढ़िया, बेहतर टीचर्स नहीं होंगे, हम इन चीजों को आगे नहीं ले जा सकते, ऐसी संस्थाओं को आगे नहीं ले जा सकते। ये टीचर्स की कमी क्यों है? इस पर मैं प्रो. एस. चन्द्रशेखर, जिनको नोबेल पुरस्कार मिला, उनकी एक बात से अपनी बात खत्म करूंगा। उन्होंने उनकी जीवनी लिखने वाले श्री कामेश्वर सी. वाली को बताया - "I mean it is a remarkable thing that in the modern era before 1910, there were no Indian scientists of international reputation or standing. Between 1920 and 1925, we had suddenly many internationally well known men like J.C. Bose, C.V. Raman, Meghnad Saha, Srinivasa Ramanujam, and Chandrasekhar Subramanyan." सर, आज वह स्पिरिट कहां खत्म हो गई है? आगे वे कहते हैं कि अब वह स्पिरिट देश में दिखाई नहीं देती। मुझे लगता है कि संस्थाएं तो बनें, बजट भी आप बढ़ाएं, परन्तु जब तक शिक्षा के क्षेत्र में यह स्पिरिट आप नहीं लाते, तब तक इन संस्थाओं को बढ़ाने से भी हम अपने मकसद या अपनी मंजिल तक नहीं पहुंच सकते। इन सुझावों के साथ मैं इस बिल का समर्थन करता हूँ, धन्यवाद।

SHRI RITABRATA BANERJEE (West Bengal): Sir, it is always very encouraging for us when new institutions of higher education are established in our country to cater to the growing aspirations, the enormous potential and the vast needs of our population, majority of whom are young.

Sir, I stand here to support this Bill on behalf of my Party, but it is our duty, as Parliamentarians, to bring to the attention of this august House —the hon. HRD Minister is here — some lacunae as far as equitable access to quality education is concerned. For instance, if you look at both these institutions which have already started, they are functioning from temporary campuses, there are no proper laboratories, there are no libraries and there are no high-quality IT or engineering tools for training. Sir, can we imagine an engineering college without a functioning laboratory or library books? The fact is, there is an acute shortage of infrastructure in terms of accommodation as well. We have a situation where we have created an institution which was not ready to be launched, but, in a haste, to lay the foundation stone as announced, we have gone ahead. I am sure that the hon. Minister would look into this matter and this would be rectified as early as possible.

Sir, when such institutions were being established in our country, there were three aims with which these highly esteemed institutions were established. The first aim was

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to bring out brilliant professionals in our country. हरिवंश जी अभी जिनका ज़िक्र कर रहे थे - मेघनाद साहा, जे.सी. बोस, सी.वी. रमन और बाकी लोग। Pandit Jawaharlal Nehru, at that time, had stated, "They will be the architects of our modern India", so that we produce brilliant professionals in the professional education, who would be brought up through these centres of excellence. The second aim was to improve the quality of higher education in the country so that it would act as an encouragement to other engineering colleges and technology institutes as a result of which the academic standards and standard of education in other institutions also rise.

Sir, the third aim is very, very important, but unfortunately, it is being ignored nowadays. It was to ensure that poor and common people get an opportunity to have quality education in these centres of excellence. These institutions were started with a long-term perspective thinking that professional education imparted in these institutes would be a better way to improve quality of education. Now, Sir, the question is THIS: even after 55 years of establishment of the IITs and ten years of the establishment of NITs, have we been able to achieve the goals? We need to look at this.

If we look at the present scenario — Shri Rajeev Gowda was talking about it — a recent FICCI survey shows that 62 per cent of employers are dissatisfied with the quality of our Engineering graduates. A UGC survey of 1471 colleges and 11 universities has found that 73 per cent of the colleges and 68 per cent of the universities have a quality that the HRD/ UGC considers to be of medium or low quality. Yet, unfortunately, the money that the Government is spending out of its Budget is far below the promised spending of six per cent of our GDP. It is an abnormally low spending that we are doing.

Now, Sir, let me move on to another aspect. A Working Paper on the Quality of Engineering Education in BRICS countries has been released. In the coming days, the BRICS Convention would be held; it would be happening in China this time. I was going through that Paper according to which... *(Time-bell rings)*... Sir, I crave your indulgence. I would be finishing in two minutes. Now, according to that Paper, the average spending on Engineering education per year is the lowest in India among the BRICS countries. We are spending 1,300 dollars a year. The People's Republic of China spends 4,300 dollars a year per capita while Brazil spends 5,000 dollars a year. Even our fellow BRICS members, companions in the developing world, are leaving us behind. They have policies that focus

rightly on the quality and not just quantity. While we are on BRICS, let me mention that in terms of higher education and training, Russia is 47th amongst the 148 countries surveyed in the world. We are ranked only at 91. I am sure the hon. Minister, while replying, would tell us how he proposes to improve this situation.

Now, Sir, in global rankings, our IITs feature among the top 200 institutes, but our NITs are not. Now, we need to think why this is not happening. The point is, 82 per cent of the country's Engineering Graduates are ending up in professions that do not require an engineering degree. What is the Government doing to align the establishment of educational institutions like this NIT that we are approving today with market research, so that we know what employers are looking for before we push our youth through an engineering degree? Recently, the Ministry of Human Resource Development has increased the annual fee of IITs from Rs.90,000 to Rs.2,00,000. This is a huge increase. The Government says that the SC/ST/OBC students have got reservation and concession of fee. But SC/ST students, Sir, get only 50 per cent concession. That means they have to pay Rs.1,00,000. Interestingly, even for getting this fee concession, these students from the deprived sections have to deposit the fee at the time of admission and that will be reimbursed later.

THE VICE-CHAIRMAN (SHRI BASAWARAJ PATIL): Please finish.
...(Interruptions)...

SHRI RITABRATA BANERJEE: Sir, just a minute; I am finishing. I urge upon the Government that equitable access to quality education which has been a long-time demand of us must be taken into consideration. जब हरिवंश जी बोल रहे थे, मैं सुन रहा था, इतने बड़े-बड़े scientists के नाम लिए गए, इतने technocrats के नाम लिए गए। If you look into our history, before Bakhtiyar Khilji attacked India, the centre of learning was India. After that, the centre of learning दूसरी ओर चला गया, वैस्ट में चला गया। So, tolerance is a very important issue. जब बख्तियार खिलजी ने नालंदा पर अटैक किया था, उससे पहले centre of learning हिन्दुस्तान में ही था, इधर ही था।

उपसभाध्यक्ष (श्री बसावाराज पाटिल): बस समाप्त कीजिए।

SHRI RITABRATA BANERJEE: Sir, just a minute. I just request the hon. Minister on the question of tolerance in those educational institutions. अभी जो नजीब का भी पता नहीं है कि वे कहाँ हैं। Factually, I quote what Pandit Jawaharlal Nehru in his first convocation address at Allahabad University had said about these universities and about

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these institutions, 'A university stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search of truth. It stands for the onward march of the human race towards even higher objectives. If the universities discharge their duties adequately, then it is well with the nation and the people.' I am confident that the Ministry, the Government will work upon for the well-being of people. Thank you.

SHRIMATI ROOPA GANGULY (Nominated): Sir, ...(Interruptions)... सर, मैं कुछ कहना चाहती हूँ।

उपसभाध्यक्ष (श्री बसावाराज पाटिल): आप बैठिए।

श्रीमती रूपा गांगुली: हमारे पश्चिमी बंगाल में ...(व्यवधान)...

उपसभाध्यक्ष (श्री बसावाराज पाटिल): आप बैठ जाइए। ...(व्यवधान)... Please sit down. ...(Interruptions)... Now Shri A.U. Singh Deo.

SHRI A.U. SINGH DEO (Odisha): Sir, declaring the National Institutes of Technology, Science Education and Research as institutions of national importance ...(Interruptions)...

THE VICE-CHAIRMAN (SHRI BASAWARAJ PATIL): Shrimati Roopa Ganguly, please sit down. ...(Interruptions)...

SHRI A.U. SINGH DEO: Sir, give me extra time.

THE VICE-CHAIRMAN (SHRI BASAWARAJ PATIL): Your time has just started.

श्री ए.यू. सिंह दिव: सर, मैं मंत्री जी को धन्यवाद देना चाहूंगा। It is a very welcome step that the Indian Institute of Science Education and Research at Berhampur in the State of Odisha has been taken up by the Government. It is a welcome step; we are grateful. Education is a key element for developing human resources and contributing to the growth of the society. It is imperative that the Government take such steps. आन्ध्र प्रदेश और ओडिशा के जो लोग हैं, उनकी बहुत पुरानी आशाएं सरकार ने आज पूरी की हैं, हम उनको धन्यवाद देते हैं। But mere recognition of an institute is not enough. It has to be put forward correctly with adequate funding and proper staff so that an institution can go forward. मैं मंत्री जी के सामने कुछ समस्याएं रखना चाहूंगा। सर, मेरे पास एक आंकड़ा है। Hon. Minister can correct me if he thinks that it is not right. India has 6,214 engineering and

technology institutes which are enrolling 2.9 million students. इसमें से, around 1.5 million engineers are released into the job market every year. But the dismal state of higher education in the country ensures that they simply do not have the adequate skills to be employed.

सर, एक सर्वे हुआ था, एक solution based कंपनी ने वह सर्वे करवाया था और 150,000 इंजीनियर स्टुडेंट्स पर वह सर्वे किया गया था। उन स्टुडेंट्स में से 26 प्रतिशत को नौकरी मिली थी और बाकी को नहीं मिली थी। इसकी वजह क्या है? मंत्री जी, मैं कहना चाहूंगा कि आपका डिपार्टमेंट इसकी वजह से गहराई में जाए। यह गैप attribute करता है, low quality education को, क्योंकि कॉलेजों में जो curriculum है, उसको एक specific industry के लिए डिजाइन किया जाता है। पहले देखा जाना चाहिए कि कहां-कहां नौकरी है, नौकरी करने के लिए कहां जाना है, फिर उसके हिसाब से curriculum तय किया जाएगा, तो ज्यादा स्टुडेंट्स को नौकरी मिलेगी।

सर, अच्छे टीचर नहीं मिलते, एक साहब बता भी रहे थे कि 50 प्रतिशत वैकेंसीज़ खाली हैं। सर, जितनी भी वैकेंसीज़ हैं, उन्हें आप भरें। यदि वैकेंसीज़ नहीं भरी जाएंगी, तो इंस्टीट्यूशन को खोलने का कोई फायदा नहीं होगा। हमारी जितनी भी पोस्ट ग्रेज्युएट डिग्रीज़ की एवं फेलोशिप के लीडिंग इंस्टीट्यूशन्स हैं, उनके बारे में मैं मंत्री जी से जानना चाहता हूं कि उन्होंने अब तक कितने पेटेंट्स तैयार किए हैं? यह आंकड़ा होना चाहिए, क्योंकि यही उनकी क्वालिटी का बैरोमीटर है कि कितने पेटेंट्स उन्होंने किए हैं और कितने अब तक एस्टेब्लिश हो चुके हैं।

सर, सेंट्रल गवर्नमेंट बड़े-बड़े इंस्टीट्यूशन्स को पैसा देती है, लेकिन स्टेट लैवल के इंस्टीट्यूशन्स को इग्नोर किया जाता है या कम पैसा दिया जाता है। मैं कहना चाहता हूं कि वहां भी एजुकेशन इम्पॉर्टेंट है। इसलिए वहां भी एजुकेशन को उस लैवल तक लाया जाए।

सर, बरहामपुर में गवर्नमेंट ने एजुकेशन के क्षेत्र में फोकस किया है, इससे हम बहुत खुश हैं और सरकार को धन्यवाद देना चाहते हैं। उसकी कनेक्टिविटी बढ़ाने के लिए ओडिशा सरकार भी लगी हुई है। आपसे भी हम रिक्वेस्ट करेंगे कि खाली विद्यार्थी उस इंस्टीट्यूशन में जाकर पढ़ें, इसके अलावा एक ई-लर्निंग सेवा भी होनी चाहिए, जिससे उस इंस्टीट्यूशन से और सुदूर गांवों में वही लर्निंग दी जा सके, जो उन्हें वहां आकर प्राप्त होती है। ऐसा करने से बहुत जगहों में लर्निंग फैसिलिटी उपलब्ध हो सकेगी।

महोदय, मैं जानता हूं कि टाइम खत्म हो रहा है, इसलिए लास्ट में, मैं कहना चाहता हूं कि यह भी चाहता हूं कि हमारी बात बड़े मंत्री जी सुनें और कंसिडर करें कि हमारे जिले बोलांगीर में जो के.वी. एरिया है - कालाहांडी-बोलांगीर-कोरापुट, वह हिन्दुस्तान का सबसे गरीब एरिया है। वहां भी आप इस इंस्टीट्यूट की एक ब्रांच खोलें और उस क्षेत्र के गरीब एरिया को भी आप यह फैसिलिटी उपलब्ध कराएं।

महोदय, मैं मंत्री जी को फिर से धन्यवाद दूंगा कि उन्होंने ओडिशा को एक इंस्टीट्यूट देकर उसे मान्यता दी है।

श्री राजा राम (उत्तर प्रदेश): महोदय, राष्ट्रीय प्रौद्योगिकी, विज्ञान शिक्षा और अनुसंधान संस्थान (संशोधन) विधेयक, 2017 पर बोलने के लिए खड़ा हुआ हूँ। मैं आभारी हूँ, बहन कुमारी मायावती जी का, जिन्होंने मुझे इस बिल पर पार्टी की ओर से बोलने का अवसर दिया।

महोदय, भारत में तकनीकी शिक्षा, संपूर्ण शिक्षा तंत्र तो एक महत्वपूर्ण दिशा देती है, जो देश की आर्थिक, सामाजिक और विकास में सक्रिय भूमिका का निर्वहन करता है। अगर देश को विकास के पथ पर आगे ले जाना है, तो हमें शिक्षा के महत्व को समझना पड़ेगा।

महोदय, समय बहुत कम है। वैसे भी मैं कभी-कभी बोलता हूँ। इसलिए मैं एक-दो सुझाव देकर अपनी बात समाप्त करूँगा। मैं एक-दो बिन्दुओं की ओर माननीय मंत्री जी का ध्यान आकर्षित करना चाहता हूँ। नए या पुराने आईआईटीज़ की यदि बात की जाए, तो नए और पुराने कुल इस समय लगभग 31 आईआईटीज़ हैं, लेकिन यदि उनकी ग्लोबल रैंकिंग देखी जाए, तो आज वे बहुत अच्छी स्थिति में नहीं हैं। इसलिए इनकी शिक्षा की गुणवत्ता पर भी ध्यान देने की जरूरत है। मैं इस संदर्भ में माननीय मंत्री जी को सुझाव देना चाहूँगा कि इसके लिए एक्सपर्ट लोगों की एक कमेटी बनाई जाए, जो शिक्षा के स्तर व स्वरूप की गुणवत्ता को देखे और ग्लोबल लैवल पर हमारे इन संस्थानों की रैंकिंग ऊंची हो, इस दृष्टि से शिक्षा स्तर में आवश्यक सुधार लाने हेतु सुझाव दें।

महोदय, हमारे देश में नए-नए आईआईटी तो खोले गए हैं, लेकिन उनमें आज भी competent faculty का अभाव है। NITs में जिस तरह से टीचर्स की कमी है और जैसा मुझसे पूर्व वक्ताओं ने बताया है कि इनमें लगभग 45 परसेंट वैकेंसीज़ हैं, जिससे विदित होता है कि इनमें टीचरों की बहुत कमी है। मेरा दूसरा सुझाव है कि टीचरों की कमी को दूर करने की तरफ भी ध्यान देना चाहिए।

महोदय, जिस प्रकार से NIT के टीचर एक NIT से दूसरे NIT में जाकर शिक्षा देने का काम करते हैं, उसी तरह से स्टुडेंट्स को भी एक से दूसरे NIT में शिक्षा ग्रहण करने का अवसर प्रदान किया जाना चाहिए। इसके साथ-साथ मैं रिसर्च वर्क की बात करूँगा कि NIT में अनुसंधान और शोध का अभाव है, मैं चाहता हूँ कि वह अभाव भी दूर होना चाहिए। इस समय शोध का कार्य केवल DRDO, IIT, Space और तकनीकी क्षेत्र में ही विशेष रूप से किया जाता है। मैं माननीय मंत्री जी से पूछना चाहूँगा और निवेदन भी करना चाहूँगा कि NIT में शोध कार्य को बढ़ावा देने हेतु क्या कोई विशेष व्यवस्था करेंगे? मैं चाहूँगा कि इस काम में अनुसूचित जाति एवं अनुसूचित जनजाति के छात्रों को भी वरीयता दी जानी चाहिए। इसके साथ-साथ मैं निवेदन करना चाहूँगा अपने देश में विज्ञान और प्रौद्योगिकी के क्षेत्र में शिक्षा ग्रहण कर के छात्र उच्च शिक्षा प्राप्त करने एवं नौकरी करने के लिए चले जाते हैं। तो brain drain को रोकने के लिए ...(समय की घंटी)... महोदय, मैं बहुत ही कम बोलता हूँ। एकाध मिनट और दीजिए! ...(व्यवधान)...

उपसभाध्यक्ष (श्री बसावाराज पाटिल): आपका एक मिनट का ही समय था, 3 मिनट हो गए हैं। आपको 2 मिनट ज्यादा दिया है।

श्री राजाराम: मैं एकाध इम्पॉर्टेंट बात कह कर अपनी बात समाप्त कर दूँगा।

महोदय, मैं मंत्री जी का ध्यान इधर खींचना चाहूंगा कि कुछ संस्थानों में यह देखने को मिलता है कि अनुसूचित जाति, अनुसूचित जनजाति और ओबीसी के जो बच्चे होते हैं, उनके साथ भी यहां पर भेदभाव किया जाता है। हमने कई जगह देखा है, वे लोग बताते हैं कि सेकंड सेमेस्टर या थर्ड सेमेस्टर में उनको back दे दिया जाता है, पीछे कर दिया जाता है, जिससे उनका मनोबल टूटता है। मेरा मानना है कि माननीय मंत्री जी का ध्यान इधर भी जाना चाहिए। अनुसूचित जाति और अनुसूचित जनजाति के लोगों के जो बच्चे हैं, उनको जो ऋण दिया जाता है, एजुकेशन के लिए जो ऋण दिया जाता है, मैं माननीय मंत्री जी से कहना चाहूंगा कि यह ब्याज मुक्त ऋण हो, इसकी कोई व्यवस्था हो।

इसके साथ-साथ अन्त में, मैं इतना कहना चाहूंगा कि उत्तर प्रदेश इतना बड़ा प्रदेश है, आबादी के हिसाब से भी और क्षेत्रफल के हिसाब से भी, लेकिन वहाँ एक NIT इलाहाबाद में है। तो मैं माननीय मंत्री जी से कहना चाहूंगा कि इस तरह की व्यवस्था उत्तर प्रदेश में और की जाए। धन्यवाद, मान्यवर।

THE VICE-CHAIRMAN (SHRI BASAWARAJ PATIL): Now, Shrimati Vandana Chavan.

SHRIMATI VANDANA CHAVAN (Maharashtra): Mr. Vice-Chairman, Sir, on behalf of the Nationalist Congress Party, I whole heartedly support and welcome this second Amendment Bill seeking inclusion of IISER, Tirupati and IISER, Berhampur in the Second Schedule of the NITSER Act.

Sir, India is proud of its achievements in the field of science and technology. The seeds were sown by our first Prime Minister, Pandit Jawaharlal Nehru, and, in order to further promote and enhance the scientific temper in our country, establishment of more science institutes of national importance is indeed a welcome step and the need of the day.

On this occasion, I would like to flag only four points in the limited time that I have. Firstly, Sir, there is an observation; there is the National Employability Survey Report, which says, and, some of my colleagues have already mentioned it, that over 80 per cent of qualified engineers in India are unemployable. Sir, through many of these institutes, we are giving certificates, we are giving degrees, but are we really equipped enough to make them employable? Should the curriculum be changed and should it be made in such a way that we have more skills? Sir, an assessment needs to be done so that their employability increases. This is my first point.

Secondly, Sir, employability per cent of software and information-technology sector shows that only 10.54 per cent graduates were employed in this sector. Sir, we see that only major cities like Delhi, Mumbai, Bengaluru and Pune are the cities, which provide

[Shrimati Vandana Chavan]

employment in the I.T. sector. Can the Government take initiative to move to Tier-II and Tier-III cities so that more and more youth then get employment in this direction?

Sir, my third point is on the gender front. Sir, there is a survey made which shows that the male-female ratio in IITs range from 14:1 to 10:1, and, in the NITs and other State-run technical institutes, it is 8:1. There seems to be an extremely low level of female admissions in technical colleges. Sir, I would like to know what the Government would do in future and as to how the Government seeks to address the gender imbalance and encourage increased participation of women.

Sir, my last point is that we have so many institutes coming up. We have a massive outlay in our Budget for these institutes. When are we going to make sure that quality education is provided to the children in these institutes, and, also when do we dream of a day when we figure amongst the top-200 universities in the world? To do this, Sir, we have to bring the scientific temper to the grassroots, to the children in the schools.

Sir, Javadekarji comes from the city, I hail from, Pune, and, we have an institute called IUCAA. Sir, IUCAA makes the concentrated effort to see that it reaches out to children in the school. I think, this exercise needs to be done world over. Thank you, Sir.

THE VICE-CHAIRMAN (SHRI BASAWARAJ PATIL): Now, Shri V. Vijayasai Reddy.

SHRI V. VIJAYASAI REDDY (ANDHRA PRADESH): Mr. Vice-Chairman, Sir, I thank you for giving me the opportunity to speak. Sir, on behalf of my Party and my Party President, Shri Y. S. Jaganmohan Reddy, I rise to support this Bill, primarily for two reasons.

I wish the hon. HRD Minister would listen to this. Two of the institutes - IISER, Tirupati, and IISER, Berhamapur — will be brought under it as Institutes of National Importance by virtue of this Amendment Bill. It is very good.

Insofar as Tirupati Institute is concerned, I would like the hon. HRD Minister to explain this to the august House. Land has been allotted to it. The Institute has been operating since 2015 from rental premises. According to the Minister, about Rs.134 crore has already been sanctioned. The total project cost for this particular project is estimated to be about Rs. 1,000 crore. And if this is the pace at which the budgetary allocation is

going to be made year after year, how long will it take for the Government of India to complete this project?

The second point is this. IISER, Tirupati, is a mentor institution and it is under the control of IISER, Pune. There is no separate Director. And there is no separate Board of Governors. I hope the passing of this Amendment Bill will enable setting up of statutory body of Governors for USER, Tirupati, under section 11(a) of the 2007 Act. And I hope the Board of Governors and Director would be appointed.

The second reason we support this Bill is that it promotes engineering and science education. The current gross enrolment ratio in higher education in India is about 24.3 per cent; and particularly out of the total students in Undergraduate level in engineering, it is about 15.89 per cent, and in science, it is about 15.38 per cent. Compared to these low levels, let us have a comparison with China, Australia and the USA. The enrolment rate there in tertiary education is about 43.4 per cent in China, 90 per cent, in Australia and 85.79 per cent in the USA. I hope the Government of India will take additional measures to improve the enrolment rate in this regard. For these two reasons, we support this Bill.

I would like to bring to the notice of the hon. HRD Minister three issues, through you, Sir. And I will also give the suggestions. It basically promotes research ecosystem. In India, only 0.8 per cent of the GDP is being spent, as domestic expenditure, on research and development activities, whereas in China, it is two per cent of the GDP, and in Israel, it is about 4.3 per cent of the GDP.

Sir, the next issue in this regard is about the migration of talent pool. After completing graduation or post-graduation from these Institutes, the talent pool migrates to either the USA or the Europe. In fact, in 2013 alone, about 9.5 lakh engineers and scientists of Indian origin were in the USA. I would like the hon. HRD Minister to find out the reasons as to why the talent pool is migrating to other countries when the entire expenditure is partially met by the Government of India. The migration of talent pool would adversely affect the development of this country. Therefore, I request the hon. Minister to take cognisance of this and take appropriate measures in this regard.

The next point is quality of engineering education. According to the HRD Ministry, his own Ministry, India has about 6,214 engineering and technology institutions which are enrolling about 2.9 million students and around 1.5 million engineers are released every year into the job market. Many engineers, who are coming into the market every

[Shri V. Vijayasai Reddy]

year, are not able to find jobs because of the low quality of education and the low quality of education is on account of non-availability of good faculty. Therefore, I urge upon the HRD Ministry to improve the faculty standards in the engineering colleges.

Sir, I have one more suggestion in this regard. ...(*Time-bell rings*)... This can be overcome by promoting industry-university linkages. IIT-Madras is a classic example. The research part is a success story which should be replicated in all the engineering colleges. The research part at IIT-Madras creates a bridge between innovations created in the classroom and the industry.

Sir, the last point is shortage of faculty. The Standing Committee on HRD, in its Report presented in March, 2017, noted that 39 per cent of the faculty positions are lying vacant in all 23 IITs taken together. There are about 49 per cent vacancies in IIT-Roorkee, 46 per cent in IIT-Kharagpur, 16 per cent in IIT-Hyderabad and so on and so forth. The sanctioned strength of faculty in respect of 11 new NITs is about 473 against which 146 positions are vacant. Therefore, there is every necessity for the HRD Minister to address this problem. The suggestion is that the Ministry should ensure that the recruitments are done in advance so that the shortage does not develop into a crisis. Sir, I thank you very much for the opportunity.

SHRI D. RAJA (Tamil Nadu): Thank you, Sir. This Bill adds two institutes, that is, Tirupati and Behrampur to the Second Schedule of the National Institutes of Technology, Science Education and Research Act. I support this Bill.

Sir, I take this opportunity to pay my tributes to Jawaharlal Nehru and the galaxy of leaders of that period who, in fact, laid the foundations for India to emerge as a global centre for learning and for India's higher education. In fact, they played a great role in making India the country which we are today.

Sir, I want to raise three critical issues. One is regarding funding. It is good that we enhance the status of the institutes. They are being declared as national institutes, but they must get adequate funding. Government must give adequate funding for higher education. I raised this issue even a few days back. I am repeating that higher education is passing through a crisis because of lack of adequate funding. The HRD Minister must ensure that adequate funding is given.

The second critical issue is faculty. Many colleagues have pointed out that we should have very efficient and strong faculty in all these institutions. It is a fact that at one point of time, we were discussing about brain drain. Now, we discuss under-employment. Unemployment is one problem, but there is also the problem of under-employment. Engineering graduates are unemployed and under-employed. They are willing to grab any job for Rs.4,000 or Rs.5,000 per month. That is what we are witnessing today. On the one side, we talk about higher education and high technical education. IITs are world-class institutions. No doubt about it. We are proud of our IITs. Now, we are starting more and more new national institutes, but what about employability? Brain-drain is one problem, but employability is another problem. Those education graduates must get jobs. Why are they not getting jobs? What can we do? We will have to think over it and the Government will have to address that issue. This is the second critical issue for which you need to strengthen the faculty. We have adequate capacity to strengthen our faculty. This is what I understand.

(MR. DEPUTY CHAIRMAN *in the Chair*)

Sir, the third critical issue is affirmative action in favour of SCs, STs and OBCs. I mean the policy of reservation must be implemented in all the national institutes because SCs, STs and OBCs do not have that access to all these institutions and those students who come from these sections must have access and there must be the reservation policy. As far as expenditure is concerned, I think, the SC/ST, OBC students must be given some kind of treatment which allows them to meet the expenditures. Education has become very expensive now and for these sections, SCs/STs and OBCs, it is extremely expensive. They are not able to afford to pay for their education. The Government will have to address these issues. These are very critical issues. I hope Mr. Prakash Javadekar, the Minister, will assure this House and make it very clear that the policy of reservation will be implemented effectively. It should not go against the interests of these sections of students. That is what I request, Sir. Thank you.

SHRI RIPUN BORA (Assam): Thank you, Sir, for giving me this opportunity to take part in this discussion on the most important Bill which relates to the prestige of our country. While supporting this Bill, first of all, I congratulate the UPA Government and more particularly, Dr. Manmohan Singh, the former Prime Minister and his Scientific Advisor, under whose initiative and under whose concept this world class educational centre has come up.

[Shri Ripun Bora]

Secondly, I must pay my tribute and deep respect to our first Prime Minister, Pandit Jawaharlal Nehru. What India is today is because of the thoughts and vision of Pandit Jawaharlal Nehru. He is called the architect of modern India. The present science and technology of our country, what we are at this stage, is because of Pandit Jawaharlal Nehru's contribution, his thoughts and his vision.

Now, the purpose of this world-class institute was to remove regional imbalances. This was the concept of our UPA Government to remove the regional imbalances and, at the same time, to stop the brain drain.

My third point is about the access to world-class education. Now, the world-class education is not possible unless we have a very good infrastructure and, at the same time, good quality faculty. We have seen many world-class institutions in our country, like Indian Institute of Technology and Indian Institute of Management. ...*(Interruptions)*... There also we have seen that there is a huge shortage of faculty and, for shortage of faculty, the students suffer. Many of my friends have already said that we should not make any compromise on the quality of education. We are talking about quality of education but thousands and thousands of our engineering graduates are now lying unemployed. It is because of this lack of quality education. The root cause of the lack of quality education is inadequate number of faculty.

Therefore, in these two institutes, in other institutes and this National Institute of Science Education and Research also, we have got the data to show that there are a lot of vacancies and the infrastructure is yet to be completed.

So, my request to the hon. Minister is that without proper infrastructure, a good quality education, and competent and efficient faculty members, we would not achieve the target of quality education.

Sir, my another point is this. This type of institutions should not be limited only to some particular States. India is such a vast country. Now, what has happened is that the number of such institutions is very limited. Many talented and meritorious students have not been able to get admission in these institutes. So, I request the Minister that in the coming days, it should, in due course of time, expand to other parts of the country also, more particularly, to the backward areas, to the inaccessible areas. Sir, in this regard, I would like to say that as I belong to Assam, I want to make one suggestion

to the hon. Minister. My friend, Prof. M.V. Rajeev Gowda has already pointed out that the hon. Finance Minister, in his Budget Speech, has declared one Indian Institute of Science Education and Research for Nagaland. But the people of Nagaland have refused it, rather they have demanded for a SPA. Therefore, I request the hon. Education Minister to consider shifting it to Guwahati since Guwahati, Assam is the gateway of North-East India. My request is that this Institute should be shifted to Assam and the entire North-Eastern region will be benefited by this.

My last point is that this should be made free from political interference. Recently, we have seen that many Directors of these institutes have resigned as they succumbed to political interference. Even the learned members from the University Grants Commission (UGC) have also resigned from their posts succumbing to political interference. In 2015, we have seen that in a number of Indian Institutes of Technology, the concept of vegetarian hostel and non-vegetarian hostel has been brought. So, this type of division; this type of disparity should not be there and political interference should not be there. The noble idea of Pt. Jawaharlal Nehru should be executed in letter and spirit. ...(*Time-bell rings*)...

Sir, my last point is, I fully support my friend Shri Raja that the access to education should not be limited only to a particular class of people; only to the rich people. The reservation policy of the Scheduled Castes, Scheduled Tribes and OBCs should be implemented in these higher educational and world-class institutes also so that they also can get the opportunity to get this world-class education. I hope that the hon. Minister, in his reply will address these things also. Thank you very much, Sir.

MR. DEPUTY CHAIRMAN: Well, now, I have two names received after the start of the discussion. I can allow them each three minutes only, - strictly three minutes. Shrimati Vijila Sathyananth, take only three minutes and after that Shri Manish Gupta.

SHRIMATI VIJILA SATHYANANTH (Tamil Nadu): Sir, I strongly support, on behalf of my party, the new inclusion of IISER in Tirupati and IISER at Berhampur in Odisha. While supporting this Bill, I would also want to point out a few concerns and also wish that the hon. HRD Minister will look into this. With a very optimistic statement and to be very realistic, I would like to say that the top five NITs which are in Trichy, Allahabad, Warangal, Surathkal and Calicut get their students from amongst the top three per cent of the country's best brains. The basic question that now arises is as to where these students go after four or five years, after their graduations from the very reputed

[Shrimati Vijila Sathyananth]

NITs and which are very good amongst foreign companies. The main thing here is the media focussing, the media advertisements as to how the media is projecting these NITs. As everybody has spoken about all the points, I will look into this aspect. The Education Ministers say lots of words for IITs but never utter something for NITs. In fact, the scene is such that the top Indian journals put NITs as the third-grade private institutions because they haven't even cared to know about these institutions. That is the real thing. Sir, we have produced Sundar Pichai who is the CEO, Google. We have Indra Nooyi, CEO, PepsiCo. Then, we have Shri Narayana Murthy, the founder of Infosys. We have many great people from here. But how are we projecting them? The only thing we lack is the support of media to echo the achievements which are numerous. If one begins to explore, he will find that the mindset of the people plus good organizations like IITs are the only institutions in the country that are housing top brains. This needs to be changed in order to create a healthy platform for NITs to compete with world's best universities. And the same thing applies to IITs.

There is another point which I would like to make. I read on internet that NIT, Goa which was set up four years ago with a budget of Rs. 1,440 crores in the 12th Five Year Plan, failed to utilize even 10 per cent of the amount because the Government has not allotted land to establish the campus. If the funds are not utilized in the year, the funds should be added back to the Central reserve. Now, I have heard that Berhampur University, which is now in the agenda, also has the same problem and the State Government has not provided land.

I want to make two things clear. On Tamil Nadu's perspective, we want our students to be competent. We have produced great people, who are engineers, computer professionals in the U.K., the U.S., and they are globally well-acclaimed. But the main thing is, when we upgrade the syllabus, when we tune the syllabus, the students have to be ready to meet the challenges of the entrance examinations. When they want to enter NITs, when they want to go to NTs, they have to go to institutes, which are run for preparing students to Common Entrance Examinations and they are fully commercial. So, the deprived sections are completely abandoned and they never have an opportunity to enter into the big commercial bunch of institutions, which give coaching for entrance exams. That should be avoided. Firstly, there should be a common syllabus all over India. We should have common syllabus.

MR. DEPUTY CHAIRMAN: That is okay. ...*(Interruptions)*... You have made your point. ...*(Interruptions)*...

SHRIMATI VIJILA SATHYANANTH: The students should be allowed to appear for a common examination by which they will enter into world-class institutions of NITs and IITs.

MR. DEPUTY CHAIRMAN: You have made your good points. ...*(Interruptions)*... It is clear. Now, Shri Manish Gupta. ...*(Interruptions)*...

SHRIMATI VIJILA SATHYANANTH: By this, I support this Bill.

MR. DEPUTY CHAIRMAN: Now, Shri Manish Gupta. You have only three minutes.

SHRI MANISH GUPTA (West Bengal): Mr. Deputy Chairman, Sir, I rise to support this Bill. I want to make a few points here. As mentioned earlier, we have noticed that the budgetary allocation in respect of these institutes has to be increased to have a proper effect; and the total number of seats that are allocated in these institutes are inadequate considering the hopes and aspirations of the youth. We need to take a positive view on this because more than 55 per cent of the youth in this country are vying to get seats, to get employment in other sectors of the economy. So, due importance should be given to the youth. Unfortunately, we have noticed that the HRD Ministry is habitually increasing fees. Recently, there was a fee hike of 127 per cent in these institutes and about 79 per cent in NITs. This hike in fees makes it quite impossible for certain sections of our society to gain admission. This is quite a common problem in other institutions also. Even for management institutes, the fee that is charged is quite high. In fact, recently, people had come and met us; they are saying that they cannot afford higher education or higher technical education because of the high cost of education. The other issue is that a lot of research is done in these institutes and we have observed over the years that the fruits of research never devolve to the sectors in which the research is done. Research produces doctorates and Ph.Ds but there is a gap between devolution of the research to the actual sectors of the economy. The internal administration of these institutions needs to be looked into and we really need to know the state of higher technical education and research. So, I would suggest that the Minister may kindly consider whether he would like to put out an Annual Report or a White Paper on the status of such institutes and the overall status in the country.

MR. DEPUTY CHAIRMAN: Now, Shri Javadekar to intervene.

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI PRAKASH JAVADEKAR): I will finish in five minutes. ...*(Interruptions)*...

SHRI BHUBANESWAR KALIT (Assam): At Sir, it is about to be 6 o'clock. The Minister can reply tomorrow.

SHRI JAIRAM RAMESH (Karnataka): Please have the reply tomorrow. We cannot have two Ministers' reply. What is this? Shri Radha Mohan Singh's reply has exhausted us. ...*(Interruptions)*...

SHRI PRAKASH JAVADEKAR: Sir, I will not take much time. It was a very important discussion and I thank everybody who has supported this. There are 3-4 issues flagged which are very important. Shri Rajeev Gowda said that networking is very important. Let me tell you, there are 3-4 things which we are doing simultaneously. Through the National Digital Library there are 65 lakh books on your computer now. In GIAN, there are 600 professors from 58 countries who have come here and conducted a course. This year 800 will come. It increases the interaction between the faculty and students and it gives good courses to them. Under SWAYAM, 400 courses are ready. The portal is on-line and off-line on DTH. There are spoken tutorials. Then there is *Uchchatar Avishkar Yojana*, industry interaction, and more than 100 projects are actually worked out. Then there is UCL and then there is BRICS. BRICS has five countries with 12 universities; 60 universities are coordinating amongst themselves. You also raised very important issues on humanities. There is the Gandhinagar Architect Council. Architect branch is there. In every IIT we are emphasizing that there has to be one humanity course in every branch. Unemployability can be reduced practically with practical hands-on training. So, everybody becomes employable and, to that end, we have organized Hackathon last year; this year we are scaling it up with many new partners. Coming to patents, two weeks ago I was with IISc and I interacted with each post-graduate student. I was so happy because that is how things come out. Every time I did networking in Tirupati I called all faculties of IISM, IIM and Padmavati University together. We discussed together with all faculties. There is an affirmation that Central Educational Institute Reservation Act is implemented in toto. So, there is no issue. Faculty shortage is the real issue and we are addressing the faculty shortage by attracting the talented Indian students doing research abroad, tracking them from third year itself and bringing them back; I am interacting continuously and

following it up. It is a 24-hour continuous process where it is always a 'walk-in' interview like situation in all central universities.

Regarding fees, actually, we have reduced fees for the students who are having income below Rs. 5 lakh. We have reduced the fees, actually. From Rs. 5 lakhs to Rs. 9 lakhs, it is an education loan without interest. It is a big cost. We have spent Rs. 2,400 crores. Last but not the least, for students whose income is above Rs. 10 lakhs, yes, their fee has increased; but, I think, nobody will grumble. There are two good news. In IISER, Pune, a team of Ph.D. students discovered a super cluster of galaxies. That is a huge discovery in IISER, Pune alumni. They are part of a team who made ground-breaking discovery on the existence of orbit in super massive black holes. So, we are progressing on the right track and all your suggestions are welcome. Thank you.

6.00 P.M.

श्री उपसभापति: पाण्डेय जी, कुछ उत्तर देना है तो दे दो और move करो।

डा. महेन्द्र नाथ पाण्डेय: महोदय, माननीय सदस्य प्रो. एम.वी. राजीव गौडा, महेश पोद्दार...

MR. DEPUTY CHAIRMAN: One second. It is 6 o' clock. We will sit for ten more minutes and pass this Bill.

डा. महेन्द्र नाथ पाण्डेय: और श्री हरिवंश जी, श्री रीताब्रता बनर्जी, श्री ए.यू. सिंह दिव, श्री राजाराम, श्रीमती वंदना चव्हाण, श्री वि. विजयसाई रेड्डी, श्री डी. राजा, श्री रिपुन बोरा, श्रीमती विजिला सत्यानंत और मनीष गुप्ता जी ने इस चर्चा में भाग लिया, मैं उनके प्रति आभार व्यक्त करता हूँ। उनका इस बात के लिए भी आभार व्यक्त करता हूँ कि उन्होंने बहुत ही प्रसन्नतापूर्वक इस विधेयक का समर्थन किया।

महोदय, यहां नागालैंड का विषय उठाया गया, उस में राज्य सरकार के SPA, School of Planning and Architect के प्रस्ताव को वित्त मंत्रालय को भेज दिया गया है और यह प्रस्ताव गंभीरतापूर्वक विचाराधीन है। हमने उद्योगों के साथ सामंजस्य के लिए कई स्कीम्स ली हैं। इस पर कई माननीय सदस्यों के suggestions आए कि industry-based चीज़ आनी चाहिए। हमने उच्चतर आविष्कार योजना, Start-up policy, प्रधान मंत्री जी का विशेष कौशल योजना पर बल - ये सभी कार्यक्रम उन परियोजनाओं पर ध्यान देने के लिए हैं। महोदय, resources को भी जोड़ा गया है, GIAN scheme, Swayam की अभी माननीय मंत्री जावड़ेकर जी ने चर्चा की। हम जिन दो चीज़ों के लिए amendment लेकर आए हैं, उनका भी हम बहुत उच्चस्तरीय संस्थाओं भोपाल और पुणे द्वारा mentor कर रहे हैं। एक माननीय सदस्य ने कहा कि उस तरह के scientists को महत्व नहीं दिया जाता। हमारी सरकार वैज्ञानिकों को पूरी तरह महत्व दे रही है। हम ने शिक्षा में नए vision और नई चीज़ें लाकर कस्तूरिरंगन जैसे वैज्ञानिक के साथ टीम बनायी है और आगे बढ़ने का काम कर रहे हैं।

[डा. महेन्द्र नाथ पाण्डेय]

महोदय, IISER ने बहुत अच्छी उपलब्धियां प्राप्त की हैं। इस में लगातार high standard के 6,000 विद्यार्थी अध्ययन पा रहे हैं। अभी Nature Index, जो विश्व-स्तरीय ranking देता है, उसने भारतीय संस्थाओं की ranking की, तो IISER ने Chemistry की ranking में प्रथम स्थान पाया और Eartho Environment में द्वितीय स्थान, Physical Science में प्रथम स्थान और Live Sciences में third स्थान प्राप्त किया है। यह IISER की ranking है।

महोदय, बजट का उल्लेख आया। मुझे उत्तर तो बहुत सी बातों का देना है, लेकिन माननीय उपसभापति जी ने थोड़ा समय दिया है, मैं उसी में अपनी बात समाप्त करूंगा। दोनों जगहों में, बरहामपुर में जमीन allocation का काम बाकी है और तिरुपति में हमारी boundary बन गयी है। इस में DPR बनाने के लिए उनको निर्देश गए हैं और DPR बनते ही, तेज़ी से सारे बजट allot करके उसके कार्य को पूर्ण किया जाएगा।

महोदय, पेटेंट की बात एक माननीय सदस्य ने उठायी थी। IIC में 580 पेटेंट्स के लिए आवेदन किया गया। मैं समय बचाने के लिए एक-एक इश्यू पर माननीय सदस्यों द्वारा दिए गए suggestions के साथ, उनका नाम नहीं ले रहा हूं, लेकिन आज यह खुशी की बात है कि 580 पेटेंट्स IIC के अंदर आवेदन किए गए और IISER के 94 पेटेंट्स को मान्यता दे दी गयी है। यह अपने आप में बहुत ही उल्लेखनीय बात है। यह बात भी आयी है कि हमारे देश में पहले भी लोगों ने बहुत अच्छे काम किए हैं, हम उनके प्रति भी आदर व्यक्त करते हैं, लेकिन प्रधान मंत्री जी ने लगातार उच्चस्तरीय संस्थाओं को बल दिया है और 20 विश्वस्तरीय संस्थाओं को बनाने की एक बहुत कारगर पहल की जा रही है। यह अपने आप में हमारी सरकार की उल्लेखनीय उपलब्धि है। अभी एक मुद्दा उठा कि इंजीनियरिंग के क्षेत्र में महिलाओं व लड़कियों की सहभागिता कम है। इस बारे में हमारी सरकार ने एक पहल की है कि हम इंजीनियरिंग क्षेत्र में छात्राओं की संख्या को बढ़ाएंगे और आवश्यकतानुसार जहां उनके admission की requirement बढ़ेगी, supernumerary quota देंगे, लेकिन हम girls का Engineering colleges में quota बढ़ाने के काम पर आगे बढ़ रहे हैं।

महोदय, बिहार और यू.पी. का विषय भी उठा कि वहां उच्च-स्तरीय संस्थाएं कम हैं, मैं यह स्पष्ट करना चाहूंगा कि वहां भी हमारी संस्थाएं BHU, IIT, Allahabad है, IIT कानपुर है, IIT PP Mode Lucknow में है, NIT Allahabad है। अम्बेडकर यूनिवर्सिटी और IIM ऐसी तमाम संस्थाएं हैं। अभी हाल में बिहार में IIT पटना और IIT भागलपुर, PP मोड में है और इसके साथ IIM बड़ोदरा है, वहीं हमारी सरकार ने स्वयं सेन्ट्रल यूनिवर्सिटी मोतिहारी को बढ़ाकर इसमें और योगदान किया है।

जिन माननीय सदस्यों ने इस चर्चा में भाग लिया है, मैं उन सब के प्रति आभार व्यक्त करता हूं। यह प्रसन्नता का विषय है कि 28 मार्च, 2017 को यह विधेयक लोक सभा में पास हुआ है। माननीय डिप्टी चेयरमैन सर, मैं आपके माध्यम से सदन से अपील करना चाहूंगा कि इस विधेयक को यहां से भी सर्वसम्मति से पारित करने की कृपा करें।

MR. DEPUTY CHAIRMAN: Mr. Minister, you have said that the scientists are getting adequate consideration and recognition. But, you should know that even the bright

students, who come out of the engineering colleges and other science institutions, prefer either to go outside the country or to the IAS. What is the reason?

SHRI PRAKASH JAVADEKAR: Sir, the issue is very simple. We have already tracked the problem. We want to attract them back so that we have 'brain gain' instead of 'brain drain'.

MR. DEPUTY CHAIRMAN: The point that I am trying to make is that the scientists and IIT professors are the intellectual cream of the society. They are not being properly paid and not being given proper consideration, as compared with those in the administration. You must put the scientists on the top. They should not be subordinated by other people. This is the basic problem in our country.

SHRI JAIRAM RAMESH: The scientists are already on the top. A scientist is sitting at the top. ...(Interruptions)...

MR. DEPUTY CHAIRMAN: No; no. I am not a scientist. I was a student of science, you can say. ...(Interruptions)... I am a student of science even now, I would say. ...(Interruptions)...

SHRI BHUBANESWAR KALITA: That is why we wanted the reply to be given tomorrow so that we could have a longer discussion. ...(Interruptions)...

SHRI PRAKASH JAVADEKAR: On this issue, we are offering flexibility of packages in twenty world-class institutions. And, we will issue the guidelines in this regard. ...(Interruptions)...

MR. DEPUTY CHAIRMAN: Okay. Mr. Minister has understood the problem and he has responded positively. ...(Interruptions)... I hope, you would pursue that line. That is what I want. ...(Interruptions)... Now, you please move the Bill for passing.

DR. MAHENDRA NATH PANDEY: Sir, I move:

That the Bill further to amend the National Institutes of Technology, Science Education and Research Act, 2007, as passed by Lok Sabha, be taken into consideration.

The question was put and the motion was adopted.

MR. CHAIRMAN: Now, we shall take up Clause-by-Clause consideration of the Bill.

Clause 2 was added to the Bill.

Clause 1, the Enacting Formula and the Title were added to the Bill.

DR. MAHENDRA NATH PANDEY: Sir, I beg to move: That the Bill be passed.

The question was put and the motion was adopted.

SPECIAL MENTIONS

Demand for giving minimum pension of rupees three thousand and medical facilities to the retired employees of private and other sectors in the country

MR. DEPUTY CHAIRMAN: Now, the Special Mentions. ...*(Interruptions)*...
Shri Ananda Bhaskar Rapolu. ...*(Interruptions)*...

SHRI ANANDA BHASKAR RAPOLU (Telangana): Sir, the pension-less retired employees, belonging to private and other sectors, are in pathetic plight. Their superannuation is the saga of sorrows. The Employees Pension Scheme, 1995, was conceived and designed by the then Union Labour Minister, Late Shri G. Venkat Swamy, in November, 1995.

(THE VICE-CHAIRMAN (SHRI BHUBANESWAR KALITA) in the Chair.)

It was a watershed of the welfare for support-less retired employees of private, semi-Government and other sectors. They are continuing their urge and agitation for ensuring a minimum pension of Rs.3,000/- per month. The present Labour Minister assured in the other House in April, 2017, to give medical coverage to such pensioners. The Supreme Court has also evinced humanitarian concern to provide minimum and higher pension to such retired employees. About 60 lakh such retired employees are in trauma and in hopeless and helpless condition. ...*(Interruptions)*...

THE VICE-CHAIRMAN (BHUBANESWAR KALITA): Let there be order in the House.

SHRI ANANDA BHASKAR RAPOLU: Their prayers for a minimum of Rs.3,000/- monthly pension are still to be calculated. In this era of Direct Benefit Transfer Schemes and initiatives of Universal Basic Income, this urge of minimum pension to hapless retired