

SHRI JESUDASU SEELAM: Sir, right now, the hon. Minister has dealt with the fee structure. But, I would like to draw the attention of the hon. Minister, through you, Sir, to the quality of education in the Government institutions. For instance, you can take any State. People are encouraging their children to go to private institutions because the general feeling is that the standards in Government institutions are going down day by day. What are the specific steps the Government is intending to take to improve the quality and standards of Government educational institutions, especially at the college level?

SHRIMATI D. PURANDESWARI: Sir, improving standards of education is a continual process. Sir, the AICTE has ten Boards of Studies under it, where the Board of Management is also one of the Boards. The AICTE is in constant consultation with the industry to ensure that the requirements and needs of the industry are incorporated in the curriculum. Besides this, the UGC has also come up with several initiatives to ensure that the quality is assured to the students who seek admission into the management institutions.

SHRI N.K.. SINGH: Mr. Chairman, Sir, the National Knowledge Commission has made a very coherent set of recommendations which, *inter alia*, includes the setting up of an independent regulatory authority. The hon. Minister has rather summarily rejected this by saying, "No, Sir, there is no such intention". But, we all know that there is a need to have an arm's length relationship to do away with the Ministry's micro management of the educational system and, therefore, would the Minister like to explain as to what are the considerations which led to the rejection of this very important recommendation of the National Knowledge Commission for setting up of an independent regulatory authority?

SHRIMATI D. PURANDESWARI: Sir, this would require consultation with various Ministries and consultations have been on and no consensus has yet been reached. This would involve various other departments like the MCI, TCI, AICTE, UGC and several others. So, unless there is a consensus, we cannot come out with a conclusion that we would need and require an overall arching body such as this. However, Sir, until then, let me again inform the House, through you, that there is a Committee that has been set up under Prof. Yashpalji to look into the working of the AICTE and UGC, and I think, we will have to wait for the recommendations.

#### शैक्षणिक शोध में हो रही कमी

\*387. श्री राम जेटमलानी :

डा० मुरली मनोहर जोशी :

क्या मानव संसाधन विकास मंत्री यह बताने की कृपा करेंगे कि:

(क) क्या यह सच है कि देश अभी भी शैक्षणिक शोध के क्षेत्र में पिछड़ा हुआ है ;

(ख) क्या यह भी सच है कि देश में शोध कार्य अमरीका, इंग्लैंड, फ्रांस, चीन, जापान और जर्मनी के मुकाबले नगण्य मात्र है; और

(ग) यदि हां, तो वर्ष 2005, 2006 और 2007 में उपरोक्त सभी देशों द्वारा अंतर्राष्ट्रीय स्तर पर कुल कितने शोध पत्र प्रकाशित किए गए ?

मानव संसाधन विकास मंत्रालय में राज्य मंत्री (श्रीमती डी.पुरन्देश्वरी): (क) से (ग) एक विवरण सभा पटल पर रख दिया गया है ।

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††सभा में यह प्रश्न डा० मुरली मनोहर जोशी द्वारा पूछा गया ।

**विवरण**

(क) से (ग) जबकि केन्द्र सरकार द्वारा शैक्षणिक अनुसंधान के क्षेत्र में भारत की स्थिति की स्थापना के लिए कोई अध्ययन नहीं किया है, केन्द्र सरकार द्वारा विश्वविद्यालयों में बुनियादी विज्ञान अनुसंधान के सुदृढीकरण के लिए प्रो० एम०एम० शर्मा की अध्यक्षता में गठित कार्यबल ने कहा है कि विश्वविद्यालयों और राष्ट्रीय स्तर की अनुसंधान संस्थाओं के बीच कोई औपचारिक संपर्क नहीं है और संयुक्त अनुसंधान परियोजनाओं और प्रशिक्षण द्वारा इसे बढ़ावा दिया जाना चाहिए और संयुक्त राज्य अमरीका, यू.के., जर्मनी, जापान आदि की तुलना में भारतीय विश्वविद्यालयों से विज्ञान और इंजीनियरी विषयों में पी.एच. डी. करने वालों की संख्या एम.एस.सी./बी.टेक. करने वालों की संख्या से कम है। अन्य विषयों (गैर विज्ञान) में शैक्षिक अनुसंधान की स्थिति के बारे में भी कोई जानकारी नहीं है। केन्द्र सरकार संयुक्त राज्य अमरीका, यू.के., फ्रांस, चीन, जापान और जर्मनी सहित अन्य देशों द्वारा अनुसंधान दस्तावेजों की संख्या के संबंध में कोई जानकारी नहीं रखती है

**Declining trend of academic research**

†\*387. SHRI RAM JETHMALANI:

DR. MURLI MANOHAR JOSHI††

Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) whether it is a fact that the country is still lagging behind in the field of academic research;

(b) whether it is also a fact that research work in the country is negligible, in comparison to America, England, France, China, Japan and Germany; and

(c) if so, the total number of research papers published by all the above countries at the international level in 2005, 2006 and 2007?

THE MINISTER OF STATE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (SHRIMATI D. PURANDESWARI): (a) to (c) A Statement is laid on the Table of the House.

**Statement**

(a) to (c) While there is no study by the Central Government to establish India's position in the field of academic research, the Task Force on Strengthening Basic Science Research in Universities under the Chairmanship of Professor M. M. Sharma set up by the Central Government, has observed that there is no formal linkage between universities and national-level research institutions and the same should be promoted through joint research projects and training and that the number of Ph. Ds in Sciences and Engineering disciplines from Indian Universities is quite low *vis-a-vis* the number of M. Sc/B. Tech when compared to what it is in USA, UK, Germany, Japan, etc. The position in regard to academic research in other subjects (non-sciences) is also not available. No information is being maintained by the Central Government in regard to the number of research papers by other countries including the USA, UK, France, China, Japan and Germany.

DR. MURLI MANOHAR JOSHI: Sir, it is very disappointing statement given by the Government. It is now well-known that a survey conducted in 2005 has revealed that the US contributes 32 per cent of the research papers published globally, India only contributes 2.5 per cent to its credit. The number of Ph.Ds awarded in one year in U S is, 25,000,

† Original notice of the question was received in Hindi.

†† The question was actually asked on the floor of the House by Dr. Murli Manohar Joshi.

China 38,000, and India is merely 5,000. Now, this means that India lags behind in research very badly. I would also like to draw your attention in this connection to the statement by another learned Minister of this Government, Mr. Kapil Sibal, who says that India lags way behind countries, such as US and China, and then he says, the same holds true for research papers. In the past 10 years, the number of scientific papers in India has increased from 11,000 to 19,000. But in the same period, China has jumped from 10,000 to 55,000. Therefore, this is the lag which is increasing, and I am sorry to say that the Government keep no track of it, no record of it. It is not only the quality research, if I remember correctly, last time when the same subject was being discussed, the hon. Minister said that in IT sector, we are doing well, we are great, and we are earning names. Now, Mr. Kapil Sibal comes and says that the lack of research and patents case show a peculiar feature. India is not so good at path breaking research, and the Indian companies have not invested much in R&D. And then he says, even in IT, where India is considered a world leader, there has been a lack of research. May I ask the Government that looking at this very poor and dismal condition of the research, and knowing that research in basic sciences and technologies is very important for the industrial growth of this country, for the scientific growth of this country, what steps the Government will take or have decided to take in order to upgrade the quality of research, to increase the quantum of research, and to encourage it in higher institutions so that India becomes at par internationally? It is the question of producing highly skilled manpower. If you compare the manpower between Japan and India, that is the availability of high research and technologically qualified people per million, then we will also immediately understand how poorly we are showing in the international field. May I ask the Minister to inform the House what steps the Government is intending to take to ameliorate the situation?

SHRIMATI D. PURANDESWARI: Sir, pertaining to the Indian research outputs, there was a survey that was conducted to channelise about 11 combined publications and citations data of 146 countries, out of which 48 countries are the developed countries, and 98 are the developing countries, and the combined publications of the developed countries was 82.27 per cent, accounting for 94.74 per cent of the citations of the world. The developing countries contributed to 12.73 per cent of the publications and 5.36 per cent of the citations share. Asia share of publications in the world output was 16.9 per cent, and 10.4 per cent was the citations share of which the papers share of South Asia is 2.06 per cent and citations share is 0.71 per cent. The share of India is 1 per cent, and developing countries have acquired a significant ranks in the top 20 countries in the world output in 19 broad fields, and India ranks first amongst the developing countries in four major subjects, and they would be, Agriculture, Plant and Animal Science, Energy Environment, Biology and Bio-Chemistry, and she ranks second amongst the developing countries in Material Sciences, Chemistry, Physics, Geo-Sciences, Pharmacology and Toxicology, Space Science, Mathematics, Molecular Biology, Genetics, Immunology, Engineering and Micro-Biology.

DR. MURLIMANOHAR JOSHI: What is this, Sir? ...*(Interruptions)*...

SHRIMATI D. PURANDESWARI: What the Government is doing. Sir, is, a major portion of the R&D expenditure is being met by Government sources. ...*(Interruptions)*...

DR. MURLI MANOHAR JOSHI: Sir, this is not the way to reply. ...*(Interruptions)*...

MR. CHAIRMAN: Let her finish, please. ...*(Interruptions)*... Please go ahead. ...*(Interruptions)*... Please go ahead.

DR. MURLI MANOHAR JOSHI: What is the answer?

SHRIMATI D. PURANDESWARI: Sir, a major share of the R&D is being met by Government sources, and the sector-wise percentage share of the national expenditure for 2003, which is available with us, indicates that the share of the Central Government in R&D expenditure is 62.6 per cent; the share of the State Government is 8.5 per cent; for higher education, it is 4.1 percent. ...(*Interruptions*)...

DR. MURLI MANOHAR JOSHI: Of what? ...(*Interruptions*)...

SHRIMATI D. PURANDESWARI: ...For public sector industries, it is 4.5 per cent. Sir, totally, amounting to 79.7 per cent....

DR. MURLI MANOHAR JOSHI: Of what?

SHRIMATI D. PURANDESWARI: This is the public share of expenditure towards research and development.

DR. MURLI MANOHAR JOSHI: Of what? ...(*Interruptions*)... Percentage of what? ...(*Interruptions*)...

SHRIMATI D. PURANDESWARI: Sir, this is not the way to interrupt me. The Member is not listening to the reply. ...(*Interruptions*)...

MR. CHAIRMAN: Just one minute. Let the hon. Minister complete the answer.

SHRIMATI D. PURANDESWARI: Sir, the Member sought to know what the Government was doing to improve research and development in the country, or, rather to support research and development. Sir, all this would answer his question. ...(*Interruptions*)... When the Government is spending 79.7 per cent towards research and development...

DR. MURLI MANOHAR JOSHI: Of what, let her tell us.

SHRIMATI D. PURANDESWARI: ...and that coming from the private sources is just about 20.3 per cent, Sir. So, there is a necessity, and research and development is not necessarily done only by the Government but what the private sector does is also included. So, all put together, I think, we need to take a comprehensive look on that.

MR. CHAIRMAN: Thank you. Second supplementary please.

DR. MURLI MANOHAR JOSHI: Second supplementary I will ask later, but I will first ask about the first one.

MR. CHAIRMAN: Second supplementary.

DR. MURLI MANOHAR JOSHI: No, Sir. This is a very important issue. Nobody can confuse the House like this. 79 per cent of what? 92 per cent of what? The question is, what percentage of GDP are you going to invest in R&D? Are you going to invest one per cent or two per cent?

SHRIMATI D. PURANDESWARI: Sir, the GDP. ...(*Interruptions*)...

DR. MURLI MANOHAR JOSHI: 79 per cent of GDP! No, no, no. What are you talking?

SHRIMATI D. PURANDESWARI: Presently, Sir, it is. ...(*Interruptions*)...

DR. MURLI MANOHAR JOSHI: Sir, the question is, the Government has decided that they will go up to two per cent of the GDP. ...(*Interruptions*)...

MR. CHAIRMAN: Please ask your second supplementary.

DR. MURLI MANOHAR JOSHI: I will first ask about the first one.-(*Interruptions*)...

MR. CHAIRMAN: Let us not confuse her.

DR. MURLI MANOHAR JOSHI: I am not confusing her. The question is, she should not confuse the House, and also the nation. ...(*Interruptions*)...

SHRIMATI D. PURANDESWARI: Sir, I have not confused. ...(*Interruptions*)...

MR. CHAIRMAN: Let us have the second supplementary.

DR. MURLI MANOHAR JOSHI: Now, it is abundantly clear that we are lagging behind internationally in research, in various subjects; may be, this way or that way, in South Asia, that is compared to Pakistan or Bangladesh or Sri Lanka. But as compared to the developed countries, where we want to go and where we want to become the leader in science, we are lagging far, far behind, and the quality of research is very, very poor; I can say without any difficulty, with all responsibility. Under this, I want to know whether the Government will come out with a comprehensive and integrated research policy including basic sciences, technology, agriculture science, medical science, humanities and social sciences; and how much funding of the GDP, how much percentage of the GDP the Government assure this House so that the country becomes on a par, if not with the best, but at least with some of the developed countries.

MR. CHAIRMAN: Thank you.

SHRIMATI D. PURANDESWARI: Sir, the allocation for the Scientific Department was Rs. 12,000 crores in the Ninth Plan. It was Rs. 25,000 crores in the Tenth Plan, Sir, and the projected outlay in the Eleventh Plan is around Rs. 73,304 crores. So, there has been a considerable increase in the allocation towards the Scientific Department. And in terms of GDP, presently, we have been spending .81 per cent of the GDP towards research and development. But this would also need consultations and dialogue with the other Ministries like the Health, Agriculture and all such Ministries. And consultation is a continuous process.

DR. T. SUBBARAMI REDDY: I would like to know, through you, Sir, from the hon. Minister one thing. The Task Force on Strengthening Basic Scientific Research in Universities was set up under the Chairmanship of Prof. M.M. Sharma. She said, "There is no formal linkage between universities and national-level research institutions, and the same should be promoted through joint research project." In the reply, she has stated very clearly that the Chairman M.M. Sharma says that there is no linkage, and he also said that compared to USA, UK, Germany and Japan, the number of M.Sc/B. Techs in India is very low. So, what efforts is the Government making in this regard and how is it going to bring research to the level of other countries?

SHRIMATI D. PURANDESWARI: Sir, as long as research is part of the university system, research is very well. But once it was with CSIR; there has been a disconnect between the University research and the CSIR. However, the M.M. Sharma Committee has submitted its Report. The Sharma Committee Report did say that there was a disconnect between the institutes and the CSIR. The dialogue is on. We are trying to come out with probable methods to see how we can actually bridge the gap between the CSIR and the universities.

**श्री शरद यादव:** सभापति जी, मंत्री जी ने academic research के बारे में जवाब दिया है, लेकिन यह थोड़ा साफ होना चाहिए कि चीन और भारत में academic research में क्या अंतर है, क्या फर्क है? इसी के साथ मैं कहना चाहता हूँ कि पिछले 700 वर्षों से जो खोज है, रिसर्ज है, invention है, उसमें हिंदुस्तान पूरी तरह से पिछड़

गया हैं। जापान, रूस, फ्रांस, जर्मनी, चीन अपनी भाषा में सोचते हैं। याद रखिए कि जो मां की बोली में सोचेगा, वही दुनिया को बनाता है, वही खोज करता है। इस देश में सारी आबादी को आपने अंग्रेजी के माध्यम से जो शिक्षा दी है, नतीजा है कि आधी आबादी .... महोदय मैं इंजीनियरिंग कॉलेज का विद्यार्थी रहा हूं। भाषा के मामले में जोशी जी के साथ पूरी तरह सहमत होते हुए यह कहना चाहता हूं कि ट्रांसलेशन में इस सदन के अंदर जितनी भी चीजें हैं, जो आपको सुख, सबलता और सुविधा दे रही हैं, उनमें से एक भी आपने contribute नहीं की है। ट्रांसलेशन में आप जो research करना चाहते हैं, तो क्या भारत सरकार भारतीय भाषाओं में विज्ञान और ज्ञान की बात को उठाकर बढ़ा कर आगे बढ़ने का काम करेगी? कोई long term planning करेगी या नहीं? अभी तो फिलहाल जो ढांचा बना है, उसमें मैं जोशी जी को माफी के साथ कहना चाहता हूं कि कितना ही माथा मार लीजिए, आधी से ज्यादा energy तो ... मैं खुद इसका भुक्तभोगी, हूं। मैं गांव के स्कूल में .... (व्यवधान)....

**डा० मुरली मनोहर जोशी:** मैं आपसे बिलकुल सहमत हूं।

**श्री सभापति:** प्लीज आप सवाल पूछ लीजिए।

**श्री शरद यादव:** मैं सवाल ही पूछ रहा हूं, आप कैसी बात कर रहे हैं? जो सवाल ठीक होगा, उस सवाल को पूछ रहा हूं। मैं निवेदन करना चाहता हूं कि ट्रांसलेशन से 700 वर्ष तक यह देश कुछ नहीं कर पाया। Zero और numerical की खोज की थी, आपने जब अपनी भाषा में सोच रहे थे। अब इस दुनिया में इंसान की जिंदगी को सहज और सरल करने के लिए आपने कोई चीज contribute नहीं की है, तो आप भारतीय भाषाओं में ज्ञान और विज्ञान को बढ़ाने की भी कोई प्लानिंग करेंगे या नहीं करेंगे, ये दो सवाल मैंने आपसे पूछे हैं।

SHRIMATI D. PURANDESWARI: Sir, the percentage-wise contribution of China towards research is about 2.6 and the contribution of India is about 1.91. This is the percentage of research papers that both the countries have come out with. With regard to the second part of the question... (Interruptions)...

**श्री शरद यादव:** मंत्री जी, एक बात जान लीजिए कि चीन चीनी भाषा में कर रहा है, इसलिए भी आगे बढ़ा है। .... (व्यवधान)....

**डा. मुरली मनोहर जोशी:** जापान भी हैं।

**श्री शरद यादव:** जापान, जर्मनी, सबका नाम लिया है मैंने।

MR. CHAIRMAN: Please let her answer. (Interruptions)...

SHRIMATI D. PURANDESWARI: Until now, accepting the fact that English is the international language, all the papers have come out in English. It is left to the individual researcher. If he wants to do it in the regional language... (Interruptions)...

MR. CHAIRMAN: Dr. Sahib, you had your chance. Please don't interrupt. (Interruptions)...

SHRIMATI D. PURANDESWARI: Sir, a person can present his research papers in the regional language if he is interested to do so. Up-till now, there is ... (Interruptions)...

MR. CHAIRMAN: Please. Let there be no interruptions. (Interruptions)... Please proceed. (Interruptions)...

SHRIMATI D. PURANDESWARI: An individual can present his papers in the regional language or in whichever language that the person wants to present his paper. As per the Government, until now there has been no decision on the translation of research papers.

MR. CHAIRMAN: Dr. (Shrimati) Kapila Vatsyayan. (*Interruptions*)...

DR. MURLI MANOHAR JOSHI: Sir, now everything is in a continuing process. Nothing is decided. सर, हम हैं किसलिए यहां? हम जो सवाल यहां ....(व्यवधान)....

MR. CHAIRMAN: Now, will you give a chance to another hon. Member to put her supplementary? (*Interruptions*)...

डा. मुरली मनोहर जोशी: सभापति महोदय, हम यह जानना चाहते हैं कि ....(व्यवधान)....

MR. CHAIRMAN: The last supplementary was not yours (*Interruptions*)...

डा. मुरली मनोहर जोशी: सर, मेरी गुजारिश सुनिए कि हम लोग यहां सदन में देश को बनाने के लिए और ....(व्यवधान)....लेकिन अगर इस तरह ....(व्यवधान)....

MR. CHAIRMAN: Let the supplementary be asked. (*Interruptions*)...

डा. मुरली मनोहर जोशी: वे इतने साल मंत्री रह चुके हैं । ....(व्यवधान)....

MR. CHAIRMAN: Dr. Sabih, please, Let the supplementary question be asked. (*Interruptions*)... Dr. Sahib, please.

डा. मुरली मनोहर जोशी: एक बहुत अहम सवाल शरद जी ने उठाया है । ....(व्यवधान)....सभापति जी, यह क्या तरीका है ? ....(व्यवधान)....

MR. CHAIRMAN: May I request you, please don't interrupt? (*Interruptions*)...

डा. मुरली मनोहर जोशी: एक बहुत अहम सवाल शरद जी ने उठाया है । ....(व्यवधान)....सभापति जी, यह क्या तरीका है ? ....(व्यवधान)....

MR. CHAIRMAN: Please go ahead with the question. (*Interruptions*)...

डा. मुरली मनोहर जोशी: सभापति महोदय, आप एक मिनट का समय दे दीजिए । ....(व्यवधान)....

श्री सभापति: आपके सवाल का जवाब अगर नहीं मिला तो उसके दूसरे तरीके हैं । ....(व्यवधान)....

डा. मुरली मनोहर जोशी: दूसर तरीके माने नहीं जाते । 4-6 दिन का सदन रह गया है, आप डिसकशन नहीं करेंगे । कई बार जब हम half-an-hour-discussion की मांग करते हैं तो वह मंजूर नहीं होती है । मेरा मतलब यह है कि ....(व्यवधान)....

श्री सभापति : डा. साहब ....(व्यवधान)....

डा. मुरली मनोहर जोशी: डिसकशन होनी चाहिए । ....(व्यवधान)....ऐसा तो नहीं है ....(व्यवधान)....

श्री रुद्रनारायण पाणि: महात्मा गांधी ....(व्यवधान)....

श्री सभापति : पाणि जी, आप बैठ जाइए । ....(व्यवधान)....डा. कपिला वात्स्यायन ।

श्रीमती विप्लव ठाकुर: आज महात्मा गांधी याद आ रहे हैं ।

श्री रुद्रनारायण पाणि: महात्मा गांधी केवल आपके हैं क्या ? ....(व्यवधान)....

DR. (SHRIMATI) KAPILA VATSYAYAN: Mr. Chairman, Sir, would the hon. Minister tell us the breakdown of disciplines in the field of basic sciences? Basic sciences is a generic term, so is academic research. There is a widespread impression that India is not giving much attention to basic science which takes one to theories which change the world. Would she like to comment on that? What is the relationship between the CSIR laboratories — many of them are without any Directors, at the moment—the university system and research organisations in the field of science?

SHRIMATI D. PURANDESWARI: Sir, the break up of papers in 2005-2006 was, in arts -7,605; in sciences-5,625; in commerce and management- 1,115; in education- 599; in engineering and technology- 1,058; in medicine-438; in agriculture- 1,119; in veterinary sciences - 180; in law - 182 and in others, which include music, art, library sciences, physical education, journalism, social work, etc., - 809. In the year 2005-06, the total number of doctorate degrees awarded was 18,736. With reference to the CSIR, I would like to apprise the House that the M.M. Sharma Committee did say that there was no connection between the CSIR, the research happening in CSIR and the universities. Sir, consultations are on to ensure that there is a connection between the two, that is, the universities and the CSIR.

#### **Representation of non-teaching staff in universities**

**\*388. SHRI SYED AZEEZ PASHA:** Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) whether Government is aware of the demand of the All India University Employees Confederation, to provide representation to non-teaching employees in the decision-making bodies of the universities;

(b) if so, whether any steps have been taken by Government;

(c) if so, the details thereof; and

(d) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (SHRIMATI D. PURANDESWARI): (a) to (d) A Statement is laid on the Table of the House.

#### **Statement**

(a) to (d) Yes, Sir. The Government is aware of the demand of the All India University Employees Confederation to provide representation to non-teaching employees in the decision-making bodies of the universities. A university is established either by the Parliament or by the State legislature concerned. Besides, under section 3 of the University Grants Commission Act 1956, the Central Government also declares, upon the advice of the UGC, an institution to be 'deemed-to-be-university'.

While universities established by statutes (both Central and State) function in accordance with the provisions of the relevant Acts, the institutions that are granted the status of 'deemed-to-be-university', function as per their Memorandum of Association and Rules of Association. These universities take their own decision with regard to the composition of their various decision-making bodies and as such the Government has no role with regard to providing representation to the non-teaching employees in their decision-making bodies.

SHRI SYED AZEEZ PASHA: Sir, it is an era of democratisation. When the workers are getting their due place in decision-making in factories, why can't the non-teaching employees be given representation in decision-making bodies of universities? Since the UGC is funding various universities, can't they give some concrete directive in the form of recommendations in order to provide representation to non-teaching employees in the decision-making bodies of universities?