Association of Indian Universities
Vol. 55  No. 39  •  September 25-October 01, 2017

S N Hegde
Perspectives of University Autonomy

J Madegowda
Institutional Mechanism for Prevention of Plagiarism

G Kamalakar and K Kamala
Academic Reforms in India with Reference to Semester System and Credit Transfer

N V Ratnalikar
Quality Education and its Objectives

Manohar Parrikar
Disruptive Ideas for Transforming the Nation
— Convocation Address
Perspectives of University Autonomy

S N Hegde*

The desire to be independent is manifested by large number of animal species including man (sp. Homo sapiens). Even many plants do not like to live in the shadow of a big tree with a large canopy. Freedom is one of the most cherished ideals of life and living. For individuals as well as institutions, to have liberty is an innate desire for sound growth and development.

Universities are generally held to be autonomous institutions of higher (tertiary) learning with built-in mechanisms in the form of Acts, Statutes, Ordinances, Regulations and Rules in addition to certain conventions and traditions. They also have functionaries such as the Syndicate/Syndicate, Academic Council, Faculties, Boards of Studies, Finance, Planning and other Committees / Councils [nomenclature of these authorities varies as per the provisions of Acts by which the universities are governed]. Therefore, there are reasons to believe that universities have the requisite freedom and autonomy to function the way they want to and shape their destiny in accordance with the carefully and collectively prepared road map. At present we have universities for general and liberal education, specialized professional courses, open and distance learning and those to promote women’s issues, folklore, fine arts, rural development, languages, sports, etc. Higher education is a global subject and hence it is relevant to have glimpses of functioning of some good universities abroad before examining the Indian scenario in general and that of Karnataka State in particular.

Characteristics of Globally Recognized Universities

Self-reliance and self-governance are the twin hallmarks of world-renowned universities whether public or private. Colossal corpus funds are created through generous contributions from alumni, corporates and philanthropists. Students / parents pay high fees either directly or indirectly (through low-interest, long-term loans) for the reason that a good university degree would reward them with substantial dividends in future. These universities attract talented students and faculty nook and corner of the world. For instance, Oxford University has students from more than 140 countries. Peking University admits students from 80 countries and has about 120 MoUs [Memorandum of Understanding] covering 40 countries. Yale University has students from 108 countries. It is strange but true that many Japanese universities are luring foreign students by offering graduate programs in ‘English’! The objective behind this strategy, it appears, is to provide global learning experience to their students in a cross-cultural milieu. Currently, Chinese universities are patronizing good number of foreign students. For example, the lesser known Jiao tong University has a population of overseas students larger than that of IIT Delhi. Internationalization is one of the striking features

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THESES OF THE MONTH

SCIENCE & TECHNOLOGY

A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of July-Aug., 2017)

AGRICULTURAL & VETERINARY SCIENCES

Agronomy
1. Harwinder Kaur. Production enhancement and quality improvement of determine and dwarf genotypes of Ethiopian mustard (Brassica carinata A Br) through optimization of sowing dates, crop geometry and nitrogen doses. Department of Agronomy, Punjab Agricultural University, Ludhiana.

Biotechnology

Entomology
1. Chhavi. Bioecology and management of rice leaf folder chomphoroceris medialis (Guene) infesting paddy in Himachal Pradesh. (Dr. Pawan Kumar Sharma), Department of Entomology, CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur.


Extension Education
1. Ojha, Pankaj Kumar. Study of effectiveness of different extension teaching methods under KV system of Bihar. (Dr. Madan Singh), Department of Extension Education, Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur.

Food Science & Technology
1. Gayas, Bazilla. Ultrasound assisted extraction of oil from apricot kernels (Prunus armeniaca L). Department of Processing & Food Engineering, Punjab Agricultural University, Ludhiana.

BIOLOGICAL SCIENCES

Biotechnology
1. Chithra, S. Bioprospecting of endophytic fungi from various cultivars of piper nigrum. (Dr. Radhakrishnan E K), Department of Biotechnology, Mahatma Gandhi University, Kottayam.

2. Malik, Sunita. Genome-wide search for nuclear-encoded RNA maturases using bioinformatical approach and expression studies of NMAT genes. (Prof. SM Paul Khurana and Prof K C Upadhyaya), Department of Biotechnology, Amity University, Gurgaon.

3. Yuvraj. Asymmetric total synthesis of biologically active natural products employing chiral catalysts. (Dr. Satyendra Kumar Pandey), School of Chemistry and Bio-Chemistry, Thapar University, Patiala.

Botany
1. Mishra, Dibyaranjan. Parental genetic diversity, heterosis and genetic analysis for quantitative traits in sesame (Sesamum indicum L). (Dr. Swapang Kumar Tripathy), Department of Botany, Utkal University of Culture, Bhubaneswar.

2. Rout, Suchitra. Traditional use of medicinal plants by some primitive tribes of Odisha. (Dr. Hemanta Kumar Patra), Department of Botany, Utkal University of Culture, Bhubaneswar.

3. Sahoo, Rajasri. Antioxidant and antiulcer activity of macrotomya uniflorum (Lam) verde under nickel stress. (Prof. Santi绿化 Sahoo), Department of Botany, Utkal University of Culture, Bhubaneswar.

Life Science
1. Acharya, Sarbani. Exploration of various strategies for leukemia therapy by drug loaded nanoparticles. (Dr. Sanjeeb Kumar Sahoo), Department of Life Science, Utkal University of Culture, Bhubaneswar.

2. Doureradjou, Peroumal. T cell apoptosis and immune responses in autoimmunity. (Dr. Satish Devadas), Department of Life Science, Utkal University of Culture, Bhubaneswar.

3. Mohapatra, Rajesh Kumar. Studies on some biological aspects of Indian pangolin (Manis crassicaudata Gray, 1827). (Dr. Sudarsan Panda and Prof. Prafulla Kumar Mohanty), Department of Life Science, Utkal University of Culture, Bhubaneswar.

4. Samal, Surya Kant. Characterization and diagnosis of acromonas hydrophila infection in freshwater fish. (Dr. Basanta Kumar Das and Dr. Bibhuti Bhusan Pal), Department of Life Science, Utkal University of Culture, Bhubaneswar.

5. Sarangi, Anshuman. Pathophysiological roles of cytokines TNF-ALPHA, IL-12, IL-4 in malaria. (Prof. Prakash Chandra Mohapatra), Department of Life Science, Utkal University of Culture, Bhubaneswar.

6. Thiruvasangam, A. Modulation of T helper cell function and apoptosis reactive oxygen species. (Dr. Satish Devadas), Department of Life Science, Utkal University of Culture, Bhubaneswar.

Marine Science
1. Joy, Rose Wine. Economics of water quality and risk: A study of aquaculture farms in the Vembanad Lake area. (Dr. K T Thomson), School of Industrial Fisheries, Cochin University of Science & Technology, Kochi.

3. Peter, Reynold. Molecular studies on Gonad Inhibiting Hormone (GIH) gene in Indian white shrimp (Penaeus indicus, H Milne Edwards, 1837) and tiger shrimp (Penaeus monodon, Fabricius 1798) and expression of recombinant GIH (rPmGIH). (Dr. P C Thomas), Department of Marine Sciences, Cochin University of Science & Technology, Kochi.

4. Prasad, R. Sediment dynamics, heavy mineral depletion and morphological changes of a placer mining beach of SW Coast of India. (Dr. N P Kurian), National Centre for Earth Science Studies, Cochin University of Science & Technology, Kochi.

Microbiology
1. Maji, Usha Jyoti. Phenotypic and genomic diversity of lactic acid bacteria and their efficacy as probiotics in freshwater fishes. (Dr. Sriprakash Mohanty), Department of Microbiology, Utkal University of Culture, Bhubaneswar.

Zoology
1. Bej, Dilip Kumar. Studies of mitochondrial genome in Indian major carps. (Dr. Paramananda Das and Dr. P Jayasankar), Department of Zoology, Utkal University of Culture, Bhubaneswar.

2. Mohanty, Rajalaxmi. Studies on the biodiversity patterns and commercial values of fishery resources on Bay of Bengal at Paradip Orissa. (Prof. Ajay Kumar Patra), Department of Zoology, Utkal University of Culture, Bhubaneswar.

3. Rout, Sucheta. Studies on the resurgence of brown plant hopper in rice and its effective management through neem and karanja. (Prof. Mayabani Jena), Department of Zoology, Utkal University of Culture, Bhubaneswar.

4. Sharma, Manoj Kumar. Efficacy of wildlife protection act for wildlife conservation study of Satpura Tiger Reserve, MP. (Dr. Neeraja Shivastava), Department of Zoology, Madhya Pradesh Bhoj (Open) University, Bhopal.

EARTH SYSTEM SCIENCES
Environmental Science
1. Asha, P. Novel cellulases through culture-dependent and metagenomics based approaches: Discovery and characterization. (Dr. I S Bright Singh), School of Environmental Studies, Cochin University of Science & Technology, Kochi.

2. Augustine, Arun. Production optimization of the marine microalgae picochlorum maculatum MACC 3 as source of polyunsaturated fatty acids. (Dr. Valsamma Joseph), School of Environmental Studies, Cochin University of Science & Technology, Kochi.


4. George, Riya. Bacillus cereus MCCB 101 as bioaugmentor for detritus degradation in a simulated zero water exchange shrimp grow out system. (Dr. Robert H Read Dr. I S Bright Singh), School of Environmental Studies, Cochin University of Science & Technology, Kochi.

5. Sivaji, Divya. Evaluation of three species of cyanobacteria for production of phycobiliproteins. (Dr Ammini Joseph), School of Environmental Studies, Cochin University of Science & Technology, Kochi.

6. Thomas, Mercy. Adsorption isotherm characterisation of porous materials using John isotherm. (Dr. V Sivanandan Achari), School of Environmental Studies, Cochin University of Science & Technology, Kochi.

7. Thomas, Shrily. Waste water generation by seafood processing plants located in and around Aroor, Kerala, India: Status, characterization and treatment using strung bed suspended bioreactor. (Dr. M V Harindranath Nair), School of Environmental Studies, Cochin University of Science & Technology, Kochi.

Geology
1. Das, Pradip Kumar. Remota sensing and based studies for geo-environmental appraisal of the Coastal tracts of Balasore and Bhadrak District, Orissa in India. (Prof. Madhumita Das), Department of Geology, Utkal University of Culture, Bhubaneswar.

2. Mohanty, Aniketika. Hydrogeochemistry and its statistical evaluation in Anandapur subdivision, Keonjhar District, Orissa. (Prof. Rabindra Nath Hota), Department of Geology, Utkal University of Culture, Bhubaneswar.

3. Panda, Smruti Ranjan. Study of quartzite deposits of Bhikampali in Jharsuguda District of Orissa, India with special reference to their petrological and geochemical characteristics and study of thermo-mechanical behaviour of silica bricks produced from them. (Dr. H K Sahoo and Dr. B K Panda), Department of Geology, Utkal University of Culture, Bhubaneswar.

4. Samal, Ajit Kumar. Assessment and management of ground water resources in Eastern Part of Chilika Lagoon, Orissa. (Dr. Durga Shankar Pattanaik), Department of Geology, Utkal University of Culture, Bhubaneswar.

ENGINEERING SCIENCES
Architecture & Design
1. Sharma, Vandana. Improving durability of abode walls for enhancing vernacular architecture. (Dr. Bhunu M Marwaha and Dr. Hemant Kumar Vinayak), Department of Architecture, National Institute of Technology, Hamirpur.

Biomedical Engineering
1. Arya, P S Devi. Region of interest based PET image compression using linearly predicated wavelet coefficients. (Dr. Mini M G), School of Engineering, Cochin University of Science & Technology, Kochi.

Civil Engineering
1. Varia, Dipak Jethalal. An innovative method for approximate analysis of intermediate structures. (Dr. Harshvadhan Patel), Department of Civil Engineering, Rai University, Ahmedabad.

Computer Science & Engineering

6. Diwakar, Manoj. A noise reduction based computed tomography image enhancement. (Dr. Manoj Kumar), Department of Computer Science, Babasaheb Bhimrao Ambedkar University, Lucknow.

4. Kalra, Nikhil. On variant of regulated grammar and regulated automation. (Dr. Ajay Kumar), Department of Computer Science & Engineering, Thapar University, Patiala.

5. Parmar, Ghanshyambhai Sureshbhai. Optimized resource management in cloud environment. (Dr. Vimal Pandya), Department of Computer Science, Rai University, Ahmedabad.

6. Patel, Hassamukh B. A comparative study of object
extraction and boundary tracing algorithms for image processing and development of algorithm for image enhancement and boundary tracing. (Dr. Priya Swaminarayan), Department of Computer Science, Rai University, Ahmedabad.)

7. Prajapati, Rameshbabu Tribhovanabh. An algorithm for load balancing in computational grid with fault tolerance using activity based and CPU usage approach. (Dr. Samrat Vivekanand O Khanna), Department of Computer Engineering, Rai University, Ahmedabad.

8. Rayudu, Dasahyantsinh Bhagwanji. Smart two level K-means algorithm to generate dynamic user pattern cluster. (Dr. Samrat Vivekanand O Khanna), Faculty of Computer Engineering, Utkal University of Culture, Bhubaneswar.

9. Saha, Sanjib Kumar. Intelligent information retrieval system on web using semantic network. (Dr. Durga Prasad Mohapatra), Department of Computer Science & Engineering, Utkal University of Culture, Bhubaneswar.

10. Smiju, I S. Stakeholder management in ERP and core banking software projects. (Dr. M Bhasi), Department of Computer Application, Cochin University of Science & Technology, Kochi.

11. Sonar, Sanjay Bhagwan. Design and development the common interface oriented framework (Paradigm) to improve compatibility of the pure object oriented cross languages interoperability. (Dr. Samrat Khanna), Department of Computer Science, Rai University, Ahmedabad.


15. Thokchom, Tangledhwar Singh. Offline handwritten character recognition of Manipuri script. (Dr. Seema Bawa, Dr. P K Bansal and Dr. Renu Vig), Department of Computer Science & Engineering, Thapar University, Patiala.

Electrical & Electronics Engineering

1. Motiyani, Rakesh Jayachandra. Development of comprehensive measurement placement method for power system state estimation. (Dr. Ajitranjan Ranjishin Chudasama), Department of Electrical Engineering, Rai University, Ahmedabad.

2. Sumi, M. Design, development and analysis of chipless RFID tags using planar multiresonators. (Dr. S Mridula), School of Engineering, Cochin University of Science & Technology, Kochi.

3. Tangella, Bhavani Shanker. Acoustic emission signal based investigations involving laboratory and field studies related to partial discharges and hot-spots in power transformers. (Dr. Gururaj S Punekar and Dr. Nagammal H N), Department of Electrical & Electronics Engineering, National Institute of Technology, Karnataka.

Electronics & Communication Engineering

1. Ashoka, H N. Novel pattern recognition system based on intelligent feature extraction and classification techniques. (Prof. Rabindranath Bera and Dr. Manjain V D), Department of Electronics and Communication Engineering, Sikkim Manipal University, Sikkim.

2. Painam, Balveer. Design and performance analysis of photonic crystal of waveguide for bio-chemical sensing applications. (Dr. K S Kalra and Dr. Mukesh Kumar), Department of Electronics and Communication Engineering, Thapar University, Patiala.

Mechanical Engineering

1. Patel, Dilip Manubhai. The experimental approach of manufacturing hardened barrel screw on traditional lathe machine with different parameters. (Dr. Ashvinbhai Patel), Department of Mechanical Engineering, Rai University, Ahmedabad.

2. Patel, Dineshkumar Kalidas.Czanner aided design, analysis and performance investigations on a solar compound parabolic concentrator. (Dr. Brahmbhatt Pragnesh Kantilal), Department of Mechanical Engineering, Rai University, Ahmedabad.


Safety and Fire Engineering

1. Mahesa, R Rengan. Influence of personal attributes and employment and work factors on work injuries among welders. (Prof. M V Vishnuvarma), Department of Safety and Fire Engineering, Cochin University of Science & Technology, Kochi.


3. Mittal, Meena. Advanced study of queue and scheduling models under fuzzy system. Department of Mathematics, Maharishi Markandeshwar University, Ambala.

4. Panwar, Poonam. Optimal software reliability and optimal multiprocessor scheduling problems. (Dr. A K Lal and Dr. Channdr Mohan), Department of Mathematics, Thapar University, Patiala.

5. Pattnaik, Pradyumna Kumar. Study of MHD viscoelastic boundary layer flow. Department of Mathematics, Utkal University of Culture, Bhubaneswar.


Statistics

1. Savasani, Mayur Vallabhdas. Study on moderate distribution and some of its statistical inference properties. (Dr. D K Ghosh), Department of Statistics, Saurashtra University, Rajkot.

MEDICAL SCIENCES

Ayurveda

1. Hariichandran, Bikram Keshari. Study on nutritional deficiency state in children of slum area in Puri town. (Prof.Ballava Kumar Jayasingh), Department of Ayurveda, Utkal University of Culture, Bhubaneswar.