School of Bio-Science & Engineering
Jadavpur University
Organizes
UGC Sponsored Refresher Course
on
“Recent Trends in Biomedical Engineering”
in collaboration with
UGC Academic Staff College, Jadavpur University
Dates: 11\textsuperscript{th} June, 2012 to 30\textsuperscript{th} June, 2012
Venue: School of Bio Science & Engineering
Jadavpur University
Kolkata-700032
INTRODUCTION

Biomedical Engineering plays a vital role in bringing two major disciplines “Engineering” and “Medical Science” on the same platform. This provides an interdisciplinary realm where doctors, scientists and engineers work altogether to meet the demands of people to have a better life. Life is precious. We have to save and protect it. Ultimate objective of any research and development must be focused towards the benefit of mankind.

Today with the development of Science and Technology we have entered into a new world. In the present scenario, we find remarkable progress in different areas of Health Care. This rapid growth in the areas of health care has come up because of research and development activities in the areas of Biomedical Engineering. Biomedical Engineering incorporates Biomedical Instrumentation which includes development of Bio-Sensors, Signal Conditioners and Bio-signal processing systems which finally lead to the development of diagnostic and therapeutic devices. Medical Imaging and Image processing is another important area of Biomedical Engineering and this includes Digital X-Rays, Angiography, CT scanners, PET, SPECT and MRI systems. Developmental works in the areas of Medical Imaging and Image processing have enabled diagnosis much faster and accurate. Biomechanics is another core area of Biomedical Engineering and this includes Biomechanics of Soft and Hard Biological Tissues, Bio-Fluids and Application of Finite Element Methods for analysis and Design of Biomechanical Systems. Biomaterials include Bio-polymers, Bioactive Coatings and Membranes, Bio-Degradable Polymers, Bio-Implants, Drug Delivery Systems and Tissue Engineering. Rehabilitation Engineering is another core area of Biomedical Engineering.

The primary objective of this Refresher Course on “Recent Trends in Biomedical Engineering” is to bring altogether Academicians, Scientists, Technical experts from Industries and Faculty members of different institutions on a platform to explore their research and development in futuristic technology. This will lead to a systematic exchange of knowledge which will help all of us.

CONTENTS OF THE PROPOSED COURSE

- Medical Electronics
- Biomedical Instrumentation
- Medical Imaging
➢ Image Processing
➢ Signal Processing
➢ Bio-Informatics
➢ Artificial Neural Networks
➢ Bio-Mechanics
➢ Bio-Fluid Mechanics
➢ Bio-System Modeling
➢ Design and fabrication of implants
➢ Drug Delivery Systems
➢ Biomaterials
➢ Nano Bio-Materials
➢ Tissue Engineering
➢ Rehabilitation Engineering

**RESOURCE PERSONS**

Faculty members will be from Jadavpur University as well as from other leading Universities/Institutes of India. Experts from Industries and research organizations will cover some of the topics.

**ELIGIBILITY**

Full time faculty members of AICTE/UGC approved colleges and Universities of India are eligible for the course.

**APPLICATION PROCEDURE**

Application in plain paper in the given format along with a passport size photograph, duly forwarded by the Head of the Institution, should reach the Director, Academic Staff College or Course Coordinators latest by 26th May, 2012.

**COURSE FEE**

Candidates must send a Demand Draft / Banker’s Cheque of Rs. 500/- as ‘Registration fee’ (nonrefundable) in favour of “JADAVPUR UNIVERSITY” drawn on SBI, payable at Kolkata only after receiving the intimation of their provisional selection in refresher course. Acceptance of application shall be as per eligibility norms of UGC.
DAILY ALLOWANCES

As per UGC norms, the selected outstation participants will be entitled to 2nd class railway fare (AC 3 tier over 500 kms or more than 12 hours of journey) and daily Rs. 250/- towards boarding and lodging while the local participants will be entitled for Rs. 100/- as daily hospitality. Out station participants should arrange for their own accommodation. However, the course coordinators may provide necessary help in this regard if informed well in advance.
APPLICATION FORMAT

UGC – ACADEMIC STAFF COLLEGE
JADAVPUR UNIVERSITY
KOLKATA – 700098

UGC SPONSORED ORIENTATION PROGRAMME / REFRESHER COURSE IN ____________________________

1. Full Name of the Teacher (in block letters):

2. Address:   i) Residential:
               ii) for Communication:
               iii) Phone:  iv) E-mail:

3. Date of Birth:

4. Sex:

5. Please tick

6. Educational Qualification (with subject):

7. Date of joining in the college:  ____ / ____ / _______

8. Teaching Experience:  _____ years _____ months

9. Present Designation and Dept.:

10. Name and address of the College / University:

11. Whether the College admitted under 2(I) 12B of UGC:  Yes / No

12. a) Details of Previous Orientation / Refresher Course attended:
          b) Dates of last Refresher Course attended:

13. Any other information:

Place:  Date:  Signature of the Applicant

CERTIFICATE

I hereby certify that ____________________________________________________________ is interested in undergoing the Orientation Programme / Refresher Course and that he / she will be relieved in time to participate in the above course at

Place:  Office seal  Signature of the Principal /
Date:  Head of the Institution

Note: All the columns must be filled in by the applicant. Incomplete application forms will be rejected.

The application format may be downloaded from http://www.jaduniv.edu.in/asc.php
MAILING ADDRESS

Course Co-ordinators:
Dr. Monisha Chakraborty and Dr. Piyali Basak
Contact Numbers: 033-2414-6567
033-24146666 Ext: 2316
Email ID: monishachakraborty@rediffmail.com and piyali_Basak@yahoo.com
Mobile Phone Numbers: 9433917393 and 9732961540

Director Academic Staff College:
Prof. Ranjan Bhattacharya
Director,
UGC Academic Staff College,
Jadavpur University,
Salt Lake Campus,
Kolkata-700098
Phone Number: 033-23359349 (Extn-209)

LAST DATE FOR RECEIPT OF APPLICATION: 26th May 2012