

## Applied Science Department

All First year engineering activities are coordinated from the office of FE Dean.

Dean FE: Prof. Rajeev Singh is working as First year Dean since January, 2006.

Following activities are being conducted at the first year office:

1. First year time table is being prepared by Prof. Mrs. A. S. Joshi.
2. First year discipline is being looked after by Prof. N. S. Salave.
3. First year coordination activities for both academic and non-academic are being conducted by Prof Rajeev Singh along with Prof. Mrs. A. S. Waghmare, Prof. Mrs. A. S. Mirashi, Prof. Mrs. A. S. Joshi and Dr. S. D. Kulkarni.
4. Mid term and Prelim Examinations and result analysis of first year University examination are being organized and executed from Department of Applied science and Mathematics.
5. First year departmental Library is being maintained and timely updated by Dr. Mrs. S. G. Ghatte along with Prof. N. S. Salave.

### A) Research Outputs

#### 1) Prof. Rajeev Singh:

- Presented the paper on “Biogas and Marine Board from Waste Green leaves” at the international Congress of Environmental Research held at Govt. Geetanjali girls P.G. College, Bhopal between 28th -30th Dec 2007 who is also one of the co-author of the above mentioned paper. The other authors are Prof. P.G. Gosavi, Mrs. Archana Mirashi (App. Physics) and Anjali Waghmare (Engg. Chemistry) This paper has been selected for the publication in International Journal (JERAD).
- Participated as a delegate at the 5th Tata Memorial Women’s Cancer initiative Conference on Advanced breast Cancer and ovarian cancer” between 26th -28th Oct’07.

#### 2) Prof. Mrs. A.S.Waghmare:

- Presented a Paper on “ Algae: a superior alternative for production of bio diesel” in National Conference on Chemical Engg. & Environment Current trends & issues, 3-4 Nov 06 at Institute of Engg & Science., IPS Academy, Dept. of Chemical Engg., Indore (M.P.)
- Co-Author of Paper on “Biogas and Marine Board from Waste Green leaves” in the international Congress of Environmental Research held at Govt. Geetanjali girls P.G. College, Bhopal between 28<sup>th</sup> -30<sup>th</sup> Dec 2. This paper has been selected for the publication in International Journal (JERAD)

#### 3) Prof. Mrs. A. S. Mirashi:

- Presented a Paper on “ Algae: a superior alternative for production of bio diesel” in National Conference on Chemical Engg. & Environment Current trends & issues, 3-4 Nov 06 at Institute of Engg & Science., IPS Academy, Dept. of Chemical Engg., Indore (M.P.)
- Co-Author of Paper on “Biogas and Marine Board from Waste Green leaves” in the international Congress of Environmental Research held at Govt. Geetanjali girls P.G. College, Bhopal between 28 - 30 Dec 2002. This paper has been selected for the publication in International Journal (JERAD)

#### 4) Prof. Mrs. A. S. Joshi:

- Presented a paper titled “Development of mathematical modeling to determine optimum tolerance for quality improvement” in International Conference on ‘Advances in Machine Design & Industry automation – ICAMDIA – 2007’ on 10-12 Jan 2007 at COEP, Pune

**5) Prof. N. S. Salave:**

- Submitted the thesis titled “Design of Multi- wavelength of Radiometer for the Study of Atmospheric Aerosols” to the Madurai University, Madurai, Tamil Nadu towards the partial fulfillment of Master of Philosophy Degree.

**6) Dr. Shrelekh G. Ghatte: Journal Publications:**

- Asian journal of chemistry:- “Synthesis of Propan-1, 3-diones and Chromones” vol.21, no. 5 (2009), 3553 - 3556
- International journal of chemistry: - Synthesis of 2-Aryl-3-Cinnamoyl-7, 8-Benzoflavanones and flavones
- Conferences –Green chemistry, SGB Amravati University.

**7) Dr. Sunil D. Kulkarni:**

**(A) Journal Publications:**

- “Evaluation of the antioxidant activity of wheatgrass (*Triticum aestivum* L.) as a function of growth and under different conditions” **Sunil. D. Kulkarni**, Jai C. Tilak, R. Acharya, Nilima. S. Rajurkar, T. P. A. Devasagayam and A. V. R. Reddy, *Phytotherapy Research*, 20 (3), 318-327, 2006.
- “Determination of Elemental Concentration Profiles in tender Wheatgrass (*Triticum aestivum* L.) Using Instrumental Neutron Activation Analysis” **S. D. Kulkarni**, R. Acharya, A. G. C. Nair, N. S. Rajurkar, A V. R. Reddy, *Food Chemistry*, 95 (4), 699-707, 2006.
- “Evaluation of Bioaccessibility of Some essential Trace Elements from Wheatgrass by in-vitro Digestion methods” **S. D. Kulkarni**, R. Acharya, N. S. Rajurkar, A V. R. Reddy, *Food Chemistry*, 103(2), 681-688, 2007.
- “Bioaccessibility of some elements from wheatgrass (*Triticum aestivum* L.) by in- vitro gastrointestinal digestion in conjunction with neutron activation analysis using ammonium bicarbonate as an alternate base” **S. D. Kulkarni**, R. Acharya, N. S. Rajurkar, A V. R. Reddy. In Press *Journal of Radioanalytical and Nuclear Chemistry*, 279 (3), 713-717, 2009
- “Determination of Elemental content, their Bioaccessibility and Antioxidant Activity of Wheatgrass”. A.V.R.Reddy, R.Acharya, A.G.C.Nair, **S.D. Kulkarni** and N.S.Rajurkar: Bhabha Atomic Research Center, Technical Report, *BARC/2008/E015*
- “Bioaccessibility of some essential elements from pulses and cereals commonly consumed in India by *In Vitro* digestion method using Neutron Activation Analysis”. (Manuscript under preparation)
- “Effect of Cr (VI) stress on the uptake of some elements by Wheatgrass using Instrumental Neutron Activation Analysis”. (Manuscript under preparation)

**(B) International Conferences/Symposia**

- “Antioxidant Properties of Wheatgrass (*Triticum Aestivum* L.) Extracts as a Function of Their Growth” **Sunil D. Kulkarni**, Jai C. Tilak, R. Acharya, N. S. Rajurkar, T.P.A. Devasagayam, A.V.R. Reddy ICFRR, Bangalore, (2005).
- “Bioavailability studies of elements in tender wheatgrass by chemical NAA”. **Sunil D. Kulkarni**, R. Acharya, A. G. C. Nair, N. S. Rajurkar and A. V. R. Reddy. 8th international conference of Nuclear Analytical Methods in the life science (NAMLS8). Rio de Janeiro, Brazil (2005)



12. 2005: A lecture by Dr. Murali Shastry, Scientist, NCL, Pune on "Exciting world of Nanotechnology"
13. 2005: A lecture by Mr. Ashok Rasal on "Antartica Mission"
14. 2005: A lecture by Dr. Arvind Paranjpye, IUCAA on "Engineering in astronomy"
15. 2006: A lecture by Mrs. Anjali Pendse, faculty in App. Physics, SIT, Pune on "Vedic Mathematics"
16. 2006: A lecture by Dr. A.M. Datar on "Armament in Engineering" ARDE, Pune
17. 2006: A lecture by Dr. A.N.Singh, Scientist, NCL, Pune on "Environment in Indian Industries"
18. 2007: A lecture by Dr. S.S.Tambe on "Artificial Intelligence", Scientist, NCL, Pune
19. 2007: A lecture by Dr, Rajaram Nityanand, Director, NCRA-TIFR,Pune on "Cosmic Radiowaves"
20. 2008: A lecture by Dr. T. Padmanabhan, Director, IUCAA on "
21. 2008: A lecture by Dr. Jayant Gadgil, Consultant in Chemical industries on "Exciting Polymeric materials"
22. 2008: Visit to GMRT to GMRT,(Giant Meterwave Radiotelescope), Narayangaon, Pune.
23. 2009: A lecture by Dr. Sangeeta Kale on "Nanotechnology"
24. 2009: Visit to DIAT (Defence Institute of Advanced Technology), Girinagar, Pune.
25. 2010: Visit to DIAT (Defence Institute of Advanced Technology), Girinagar, Pune.