

# DU's Innovation Projects @ ANDC



In 2012, University of Delhi started a scheme of awarding Innovation Projects to colleges – constituted of interdisciplinary teams of ten students and three faculty mentors along with an external Advisor. Against a background of limitations in colleges including claustrophobic timetables, strict curriculum and lack of funds, the generously funded scheme of DU Innovation Projects appealed to all stakeholders, specially the students.

Acharya Narendra Dev College's motto of 'Beyond the Classroom' and the scheme **ELITE** was tantalizingly close to the University's idea of enhancing the teaching-learning experience through student participation. Use of mobile phones as sensors and using a bio-sensing approach for glucose detection are good examples of viability of student-innovations through projects. Others projects had societal applications by virtue of being surveys or data intensive applications like using ICT for CO<sub>2</sub> detection, exploring useful bacteria in soil and identifying hazardous effects of textile dyes. A project that involved being in greater contact with nature as it investigated locomotory behaviour in birds, also provided major input into the 'CUBE- Collaborative Undergraduate Biology Education' project of the Homi Bhabha Centre for Science Education, TIFR, Mumbai.

Since DU's Innovative projects were funded for a year there was ample time for students to reach an understanding of the problem/issues and come up with some solutions. Results of the projects were presented

at the National Conference for students –‘Redefining Science Teaching: Future of Education’, held at University of Delhi at South Campus, in March 2013 while two of the projects (102 and 103) won awards during paper a presentation competition in Gargi College. Results from project no. 103 have been published in an international journal and were presented at a symposium.

### DU’s Innovation Projects (Phase - I)

ANDC 101	Glucose Detection – a biosensing approach.
ANDC 102	CO <sub>2</sub> Gas Sensing - an ICT based investigation for pollution control.
ANDC 103	Mobile phone as a real time sensor based undergraduate laboratory.
ANDC 104	Survey-based study to identify the health hazards associated with occupational exposure of textile dyes used by dyers to colour the fabrics.
ANDC 105	Exploring useful bacteria from soil.
ANDC 106	Recording and analysis of locomotory behaviour among birds.

Good peer review and positive public interaction coupled with ANDC’s culture of research has resulted in four more DU innovation projects being awarded under the second phase. It is interesting to note that projects sanctioned under Phase - II are mainly application-based.

### DU’s Innovation Projects (Phase - II)

ANDC 201	Mobile healthcare: the future of health management in india- a feasibility study.
ANDC 202	Development of low cost computer controlled science laboratory using sensors and open source hardware and software tools.
ANDC 203	Astronomy using archival data.
ANDC 204	Artificial olfaction using E-nose – mimicking human nose for gas sensing applications.

