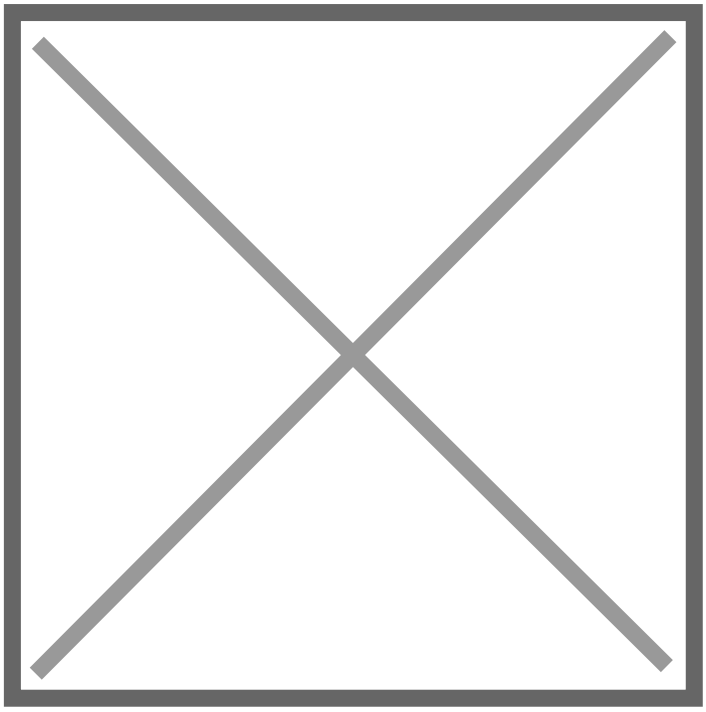
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ICT, Mumbai emerges as India's No.1 BT School

05 August 2010 | News



- *Institute of Chemical Technology (ICT) from Mumbai moved up the ladder in the Public BioSpectrum BT School Ranking (Public) from last year's Rank No. 4. ICT also made it to No. 1 Rank on faculty parameter*
- *Delhi's prestigious JNU made it to Rank No. 2*

BioSpectrum Top 20 Private Biotech Schools

Rank	Name of the Institute	City, State	Faculty Score	Industry Interaction Score	Infrastructure Score	Placement Score	Overall Score
1	Institute of Chemical Technology	Mumbai, Maharashtra	89.33	40.50	47.19	23.41	100.00
2	School of Biotechnology, Jawaharlal Nehru University	New Delhi	52.60	56.34	61.53	1.04	92.73
3	School of Life Sciences, University of Hyderabad	Hyderabad, andhra Pradesh	40.37	39.92	45.11	29.75	74.61
4	University School of Biotechnology, Guru Gobind Singh Indraprastha University	New Delhi	19.90	1.23	49.02	33.20	47.15
5	Animal Biotechnology Center, National Dairy Research Institute	Karnal, Haryana	25.99	10.26	33.99	9.31	40.81
6	Center for Plant Molecular Biology, Tamil Nadu Agricultural University	Coimbatore, Tamil Nadu	32.51	9.73	16.60	31.69	38.60
7	Department of Biotechnology, University of Kashmir	Srinagar, Jammu & Kashmir	19.66	1.25	26.27	35.72	34.18

8	Department of Molecular Biology & Biotechnology, Tezpur University	Sonitpur, Assam	24.73	10.65	15.66	11.27	29.99
9	Department of Biotechnology, Jamia Millia Islamia	New Delhi	11.73	0.62	9.87	70.56	27.80
10	School of Biotechnology, Banaras Hindu University	Varanasi, Uttar Pradesh	24.78	1.46	15.25	17.98	26.51
11	Department of Microbiology and Biotechnology, The Maharaja Sayajirao University of Baroda	Vadodara, Gujarat	10.04	2.57	8.32	49.44	22.35
12	Department of Biotechnology, University of Jammu	Jammu, Jammu & Kashmir	20.87	2.06	9.63	9.69	19.66
13	Department of Biotechnology, University of Pune	Pune, Maharashtra	16.23	0.51	8.91	16.83	17.61
14	Department of Biotechnology, University of Burdwan	Bardhaman, West Bengal	12.02	0.13	5.63	29.95	16.22
15	Department of Biotechnology, Shivaji University	Kolhapur, Maharashtra	21.99	0.00	2.99	8.99	15.10
16	Department of Biotechnology, Cochin University of Science and Technology	Cochin, Kerala	13.34	0.00	4.61	0.00	9.60
17	Department of Biotechnology, University School of Sciences, Gujarat University	Ahmedabad, Gujarat	11.72	0.24	0.81	9.85	8.83
18	Department of Biotechnology, Kumaun University	Nainital, Uttrakhand	8.55	0.00	6.47	0.62	8.36
19	School of Biotechnology, Guru Ghasidas Viswavidyalaya	Bilaspur, Chhattisgarh	3.64	0.01	8.42	5.39	8.04
20	Department of Biotechnology, Himachal Pradesh University	Shimla, Himachal Pradesh	6.00	1.80	0.00	0.00	4.02

Public BT Schools: Rajiv Gandhi Center for Biotechnology (Thiruvananthpuram, Kerala), Government Science College (Bangalore, Karnataka), Bangalore University (Bangalore), Aligarh Muslim University (Aligarh in Uttar Pradesh) and Kakatiya University (Warangal in andra Pradesh) did not participate in the 2010 survey due to on going admission processes, vacations and participation of teaching faculty in conferences.

6th BioSpectrum Biotech Schools Survey 2010- Methodology

The BioSpectrum Top Biotech Schools study includes institutions offering BTech, Masters and PhD courses but not of BSc courses. This study was conducted during May-July 2010. The ranking is based on measurable and quantifiable data. The research team did not seek perceptions and opinions of stakeholders such as students or industry to rank the institutes. BioSpectrum team sent questionnaires to over 200 institutes and followed up with them. We received about 50 questionnaires.

Step - I: Identification of Parameters for Ranking of the Institutes

Like the previous year's studies, the parameters suitable for ranking of the institutes were identified in consultation with

experts from the industry, education and R&D. Over 10 experts were consulted. Faculty, industry interface, infrastructure and placements emerged as the most important parameters.

Step-II: Ranking on the basis of the Parameters
Structured questionnaire was used to take opinion on relative importance of the four parameters prior to the study. Their opinion was sought for deciding on weights to be assigned to each parameter. The following means emerged based on data received from experts: Faculty, infrastructure, and industry interaction had emerged as the three most important parameters ahead of placement.

Step-III: Data collection, analysis and ranking of the institutes
A pre-tested structured questionnaire was sent to Directors/ Principals/ Deans of Biotech institutes by the BioSpectrum team. BioSpectrum scrutinized and validated the responses given by the institutes for accuracy, consistency and sufficiency of the data, data entry, analysis of the data and ranking of the institutes.

The research team spent considerable amount of time accurately analyzing the filled in data for each institute. For each institute, a score was arrived at for each parameter. For a particular parameter, the score was a composition of each of the sub-parameters.

Faculty score of an institute would be composed of faculty per student, qualification of faculty members, research articles published, contribution of the faculty to national and international journals, patents filed and granted.

Infrastructure score would be similarly composed of capital expenditure on lab equipment and consumables, expenditure on books and journals, and availability of dedicated and shared PCs per student. Similar scores were arrived at for industry interaction and placement using sub-parameters.

Appropriate and largely consistent weights were used for sub-parameters wherever necessary. Sub-parameter scores were indexed with hundred points being granted to the institute with highest score for a particular sub-parameter. Indexed scores were than added up for each institute to arrive at the total score for a particular parameter. Scores were than averaged on hundred.

Each of the parameters (faculty, infrastructure, industry interaction, and placements) was further weighed as per weights provided by experts to arrive at the total score of an institute.

The institutes were then ranked as per this score on an overall basis. The ranking was done separately for the public and private institutes.

Ranking Parameters

Faculty: Faculty per student; faculty qualification; faculty experience; publications by the faculty in national and international journals at different points of time; and patents filed/granted both national and international at different points of time.

Infrastructure: Expenditure on library; expenditure on lab equipment and consumables at different points of time; and labs per student.

Industry Interaction: Products developed by the institute in production; projects sponsored to an institute from industry and government sources; and royalty inflow at different times.

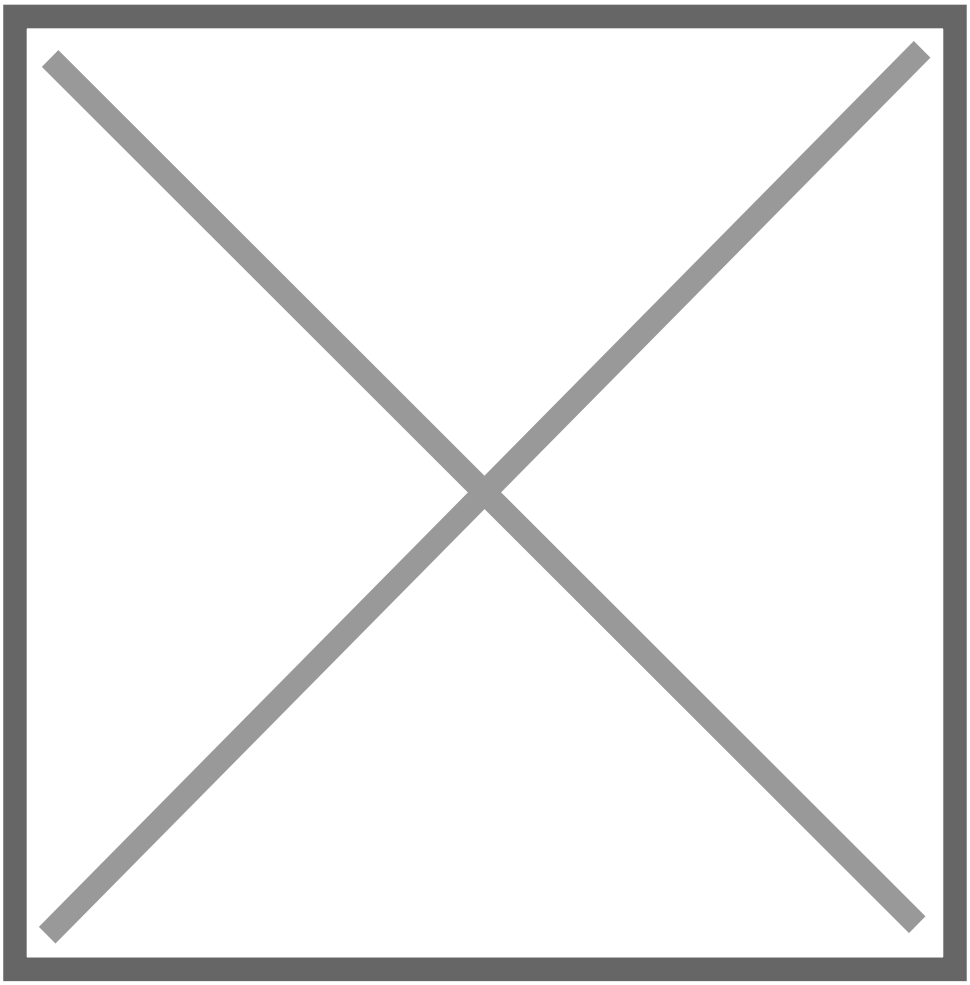
Placements: Visits of companies for campus recruitment; job offers during campus placement; number of students placed against needed; number of job offers against needed; and salary offered during the campus placement.
Weights: Infrastructure-32; Faculty-28; Industry interaction-28; and Placement-12

BioSpectrum Biotech School Survey 2010

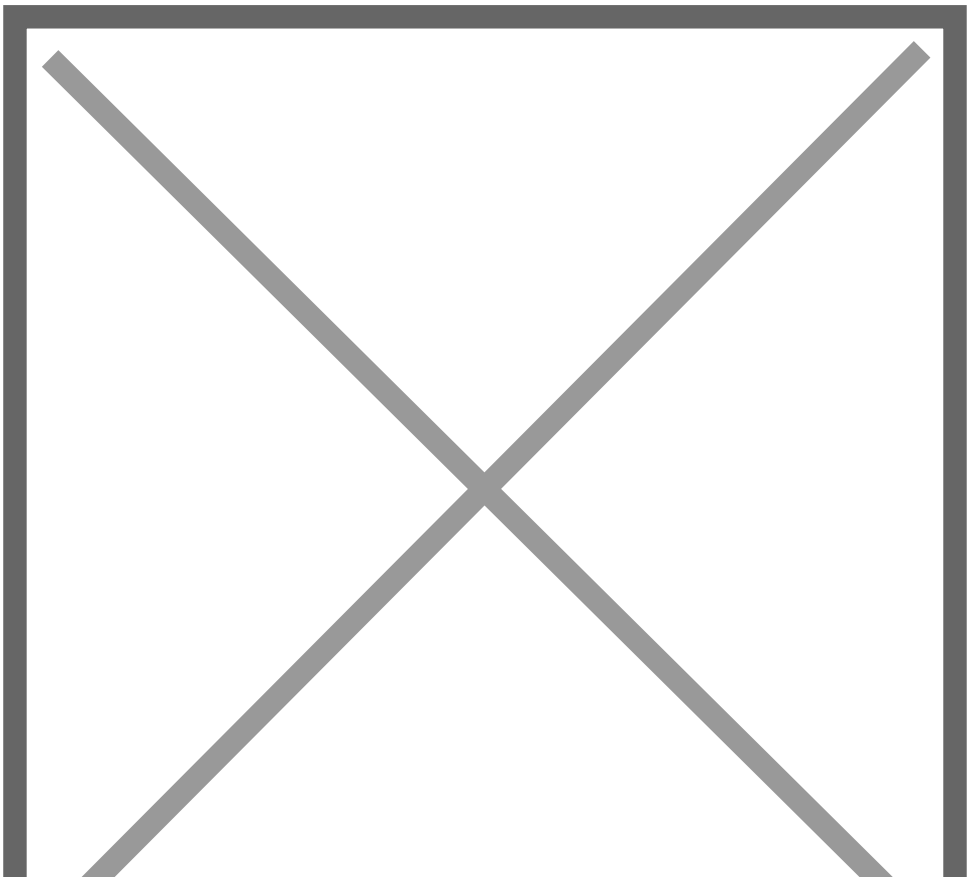
Ranking by Industry Interaction



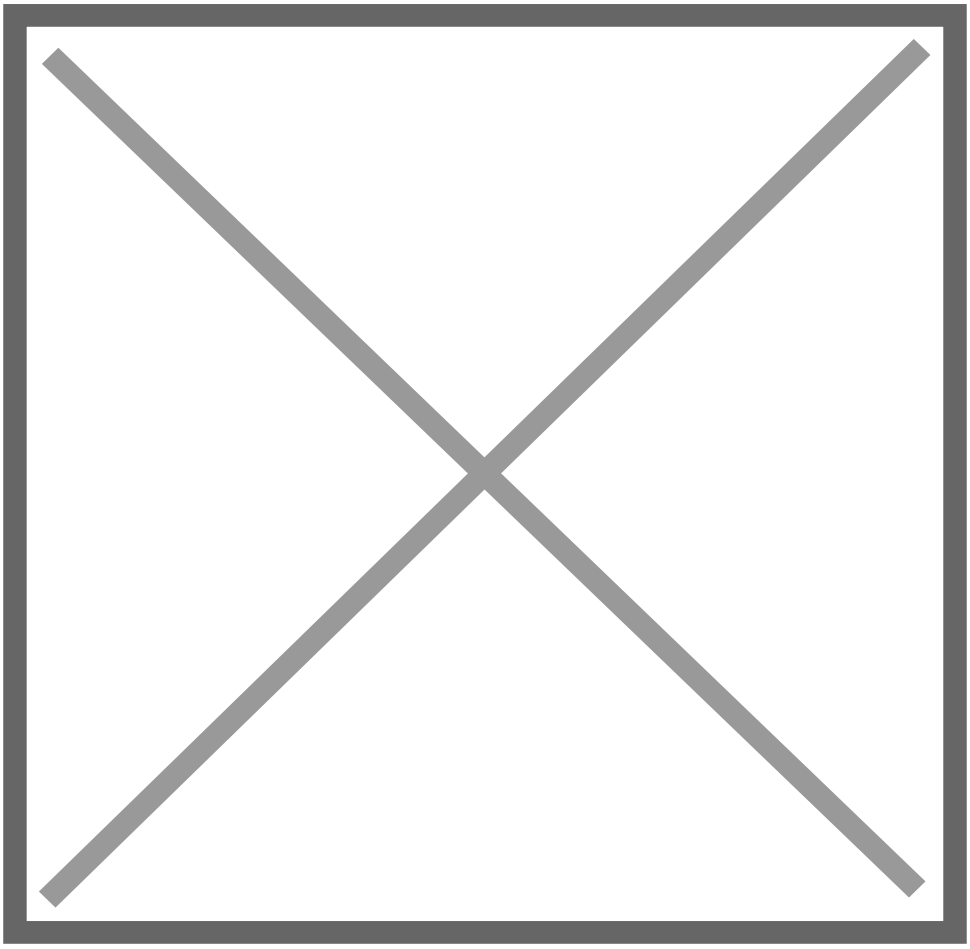
Ranking by Placement Score



Ranking by Faculty Score



Ranking by Infrastructure Score



School of Biotechnology, Jawaharlal Nehru University from New Delhi ranked No. 1 on industry interactionand infrastructure parameter. The institute runs one the finest masters degree programs in biotechnology. Most of the post-graduate students opt for higher studies with only few students taking job opportunities with the industry. The school slipped to No. 2 spot in overall ranking on account of placement scores, since its students opt for higher studies.

Public institutes offer course at affordable fees

The private institutes that offer both under-graduate and post-graduate courses in biotechnology are charging an average fee of about ₹3,20,000 for the course. Whereas post graduate course in public sector institutes costs on an averageÂ ₹49,200 for the two year course. Some of the premier universities of the country such as Jawaharlal Nehru University are charging a meager fee of ₹1,391 for the entire course of two years. Similarly, other leading universities such as Cochin University of Science and Technology, MS University of Baroda, Banaras Hindu University are offering biotechnology courses to studentsÂ at ₹6,190, ₹4,260 and ₹8,858 for the entire course.

While private institutes such as Shree Manibhai Virani & Smt Navalben Virani Science College have been charging about₹ 21,000 per annum. Sitadevi Ratanchand Nahar Adarsh College and Maharani Lakshmi Ammanni College for Women are offering biotechnology courses at ₹28,000 per annum. The biotech course at Gokaraju Rangaraju Institute of Engineering and Technology and Arunai Engineering College are being offered to students at ₹30,000 per annum and ₹32,500 per annum respectively. While other institutes in private sector are offering the course at higher fees of over₹1 lakh per annum.