

have ignored. Basing on these premises, it seems that the term 'genetic engineering' was fairly well known even by 1965.

In recent years several timelines and other publications on biotechnology have repeatedly credited the Danish microbiologist A. Justin (often referred to as A. Jost) as having coined the term 'genetic engineering' as far back as in 1941. It is now fairly certain that Justin used the term for the 'technique involving the transfer of a select piece of genetic material from one organism to another', in a lecture on sexual reproduction in yeast at the Technical Institute in Lwow, Poland⁹.

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*Not seen in original.

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Science communication: careers and courses in India

'It is suicidal to create a society dependent upon science and technology in which hardly anybody knows about science and technology.'

Carl Sagan

Knowledge about science and technology (S&T) is inevitable in this modern hi-tech world. There is a great demand for communicating or popularizing science among the masses.

The Constitution of India has a special provision 'to develop the scientific temper, humanism and spirit of enquiry'. The S&T Policy of India stresses on the dissemination of scientific knowledge and inculcation of scientific temper among the masses. Most of the S&T and related institutions or laboratories have a social mandate for science popularization and development of scientific temper among the masses.

Today, science communication is a fast-emerging field of scientific enterprise both in the developed and developing countries. But it is believed that scientists are generally unable or unwilling to communicate their knowledge and expertise to the masses, either directly or through any media. Also, the little coverage and poor presentation of S&T in different media is well recognized.

Therefore, trained science journalists, writers, reporters and communicators are in great demand in different media outlets, and the S&T and related institutions or laboratories. Recognizing this scenario, the National Council for Science and Technology Communication (NCSTC),

Department of Science and Technology (DST), Government of India, has taken the initiative, to train science graduates as skilled science communicators and equip them to present science intelligibly and effectively to the masses. The NCSTC is promoting, financially supporting and sponsoring various short-term and long-term science communication courses in India. Presently, the following courses are available at select universities/institutions in the country.

The Centre of Science Communication (CSC), Devi Ahilya University, Indore offers a two-year full-time regular Master of Science programme in science communication. It is a fellowship-based programme funded by the NCSTC. The Centre admits 20 students each year and ten fellowships of Rs 700 per month each are given to meritorious students. The Centre has also started a one-year PG Diploma in Science Communication through correspondence mode. For more details, visit www.csc.dauniv.ac.in

The Institute of Mass Communication in Science and Technology, Lucknow University, is also running a similar course – M Sc Mass Communication in Science. It is also a two-year full-time regular programme funded by the NCSTC. The Institute admits 40 students each year.

The National Council for Science Museums (NCSM) in collaboration with BITS, Pilani, is offering a two-year regular MS degree programme in science communication at Kolkata. The NCSM gives five fellowships of Rs 5000 per month

each to meritorious students admitted to the course. For more information, visit www.ncsm.gov.in or www.bits-pilani.ac.in

The Indian Science Communication Society (ISCOS), Lucknow is running a one-year 'Certificate in Science Journalism' programme. The programme is open to anyone with a basic degree in any branch of science. ISCOS admits 100 students each year. It is a distance course executable either on-line or through correspondence. For details, visit www.iscos.org

Recently, Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal has also started a one-year PG Diploma in Science and Technology Journalism. Visit www.mcu.ac.in

The Department of Journalism and Science Communication, Madurai Kamaraj University, also offers an NCSTC-funded PG Diploma in Science Communication.

In addition, the National Institute of Science Communication and Information Resources (NISCAIR), CSIR, New Delhi also organizes short-term science-writing training workshops. Visit www.niscair.res.in

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