## Arunkumar R. Parikh (1940–2022)

The Department of Chemistry at Saurashtra University, Rajkot, is now one of the well-known departments due to its great achievements under the twenty-five years of dynamic leadership of Prof. Arunkumar R. Parikh in the area of drug discovery and technology transfer of agro-based research. This honour for the department has been made possible due to his dedication, hardworking nature and profound involvement with faculty members and research scholars in both teaching and research.

Parikh, aged 82, an expert in Organic Chemistry, passed away on 18 January 2022, in Ahmedabad. He worked nearly 14 hours a day focussing on teaching and research until the end of his life. He had demonstrated proficiency in subjects like reaction mechanism, spectroscopy, natural products, medical and biochemistry. He was a passionate, self-driven professor.

Parikh was a multifaceted personality with 67 years of teaching and research experience. Born in Kaira town of Gujarat, his early schooling education was at Abu, Rajasthan. He earned graduation degree with distinction from M. G. Science Institute at Ahmedabad in 1959. He topped the Master's Degree examination in organic chemistry from Gujarat University in 1961. He joined Ph.D. programme under the supervision of R. D. Desai and was awarded the Ph.D. degree from the same University in 1967.

From 1959 to 1964, he worked as a demonstrator under Dexina Fellowship. In 1964, he continued as a tutor at M. G. Science College, Ahmedabad. He served as a Principal at Virani Science College from 1968 to 1969 and after that, joined as a University Lecturer at the Department of Chemistry, Saurashtra University at Bhavnagar. He was promoted to Reader in the same department during 1971-1980. He was also appointed as a Principal in Sir Prabhashankar Patani Institute of Science, Bhavnagar. He initiated steps to start an M.Sc. vacation course for the students who opted for a job due to financial constraints and were not in a position to join the regular M.Sc. programme. He was appointed at Department of Chemistry, Saurashtra University as full-fledged Professor and Head in 1982 until his superannuation (2003). After his retirement, he served as a consultant and visiting Professor at several Universities in Gujarat. In 2010, he moved to Ahmedabad, as an Emeritus Professor at L. J. Pharmacy College Ahmedabad, for six years and was appointed as Director till 2022. He designed the M.Sc. Chemistry syllabus pertaining to industrial requirements.

Parikh signed Memorandum of Understandings for research projects with a number of national and international research institutions and Universities, in order to screen anti-cancer and anti-HIV potential of heterocyclic compounds. The department has linked collaborative research projects with the National Cancer Institute, USA; Tuberculosis Antimicrobial and Coordination Facility, USA; the Southern Re-



search Institute, Alabama, USA for anti-HIV compounds and Aristotelian University, Thessaloniki, Greece, for the antioxidant study, Meiji Pharmaceutical University, Japan for anti-cancer drugs, Albert-Szent Gyorgyi Medical University, Hungary for plasmid curing and resistance.

One of the research papers published by his group regarding new chemical entities drew the attention of DuPont Agrochemicals, USA and entered into a collaborative programme of technology transfer for novel chemical entities with the Department of Chemistry.

The initiation of research collaborations with multinational companies and several research institutes has opened a new chapter of advanced research for the department. This collaboration initiative led directly to the philosophy of 'earning while studying'. With the help of this collaboration scheme, the department generated revenue which resulted in approximately Rs 22 lakhs in foreign exchange in 1993. The University then formed a policy sharing the income generated from this programme among the teachers and students.

In 1994, the group undertook a project with Merck Inc, USA, to synthesize potential compounds for cardiovascular, anti-inflammatory and antibacterial studies. The

years 1996-99 were important for the research group because four new projects were executed, out of which two were with multinational companies, based on the discovery of heterocyclic compounds for biological screening assigned by Spechem and RJW Pharma. Ranbaxy and Astra Zeneca had signed the project to synthesize novel bioactive compounds on the specific target of different diseases. Cadila Health Care had also shown interest in the research activity of the department, and finally, it had sanctioned the project on cardiovascular drugs. The DST-Alembic project was the flagship project of the department and was considered to be ambitious, as for the first time Rs 1.5 crore was sanctioned for developing the synthesis of anti-tubercular, antibacterial and antifungal compounds.

The journey of the industrial collaborative research programme began in 1993 and continued until 2003. Under this programme a state-of-the-art research laboratory, one centrally air-conditioned auditorium of capacity of 300 persons and a reading room with a library facility were also constructed, as Parikh had generated a revenue of Rs 96 lakhs from collaborative and industrial projects. For academicians who work in University structures, this is a shining example.

Parikh allowed all research laboratories to work round the clock. He was available anytime during office hours in the Department, even during the holidays. He had successfully guided 60 Ph.D. students, who are working at prestigious research institutes/universities/industries, and some are entrepreneurs. He has published more than 250 research papers<sup>1–5</sup> in reputed journals. He has written three books, out of which the book *Essence of Heterocyclic Chemistry* has been considered popular among the UG and PG students. He was not only an excellent teacher and researcher but also a good administrator.

He was conferred with several awards, the most notable was the Shri Champrajbhai Shroff Prize (Hari Om Ashram Award). He was also a member of the American Chemical Society and Indian Chemical Society. He has visited several countries as a visiting Professor: Cincinnati University, Ohio University, and the University of Birmingham at Alabama for six weeks under the Indo-US Exchange of Scientist Programme in 1984–85. He was awarded for his contribution to World Science and International

Scientific collaboration by the International Scientific Partnership Foundation in Russia.

It took a lot of work for Parikh to develop the research activities in the Saurashtra region when he took on the role of Department Head. However, this had never interfered with his inclination for the research activity. He faced enormous challenges like, political and financial, but he was a deterrent in progressing toward his vision for the Chemistry Department. At the time of his retirement, the department had a number of research laboratories, with each member having their own, which is his greatest accomplishment to date. His work will serve as an example for the next generation of researchers, especially those working in institutions and departments with limited resources.

He is survived by his wife Hansa Parekh, son Kunjal, daughter Khyati, and grandkids Akshat, Pavitra, Dhruvi and Gyan.

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