

PRESENTATION/LAUDATION

Professor Malay Ghosh the doctor honoris causa of the University of Economics in Katowice

On May 14, 2021, Professor Malay Ghosh was officially awarded the honorary doctorate of the *University of Economics in Katowice*, Poland. This title was awarded by the Senate of this University to Professor Malay Ghosh in recognition of his outstanding achievements in the field of statistics and its applications, as well as his commitment to promoting science and international cooperation amongst scientific communities.

Professor Malay Ghosh was born on 15 April 1944 in Calcutta, India. He completed his undergraduate and graduate courses in statistics in 1962, at the age of 18, and in 1964, at 20, respectively from Calcutta University. As a student he was awarded several scholarships. He completed his undergraduate, as well as his graduate course as a First Class First and Gold Medallist. This enabled him to enrol on a PhD course at the University of North Carolina at Chapel Hill in the United States, where in 1969 he obtained his doctor's degree written under the supervision of Professor Pranab Sen.

From 1971 to 1978 he worked as an associate professor at the *Indian Statistical Institute*. For eight years, beginning in 1974, he was employed as a professor at the *Department of Statistics of Iowa State University*. Since 1982 up to now Professor Malay Ghosh has held a position at the *Department of Statistics of the University of Florida* – first as a professor, and next as a Distinguished Professor. Besides, as a visiting professor, he has lectured at 7 universities outside the US on a variety of topics, including advanced statistical inference, decision theory, Bayesian theory, multidimensional analysis, sequential analysis as well as reliability theory.

Professor Malay Ghosh's research works significantly enrich the theoretical and applied statistics in many fields and are widely cited. Let us list some of them, starting with broad area of sequential estimation, which is directly related to the criterion of maximizing economic efficiency with limited outlays, among other things. Professor Ghosh, together with N. Mukhopadhyay and P.K. Sen, wrote a monograph entitled *Sequential estimation*, which was published by John Wiley & Sons, Inc. in 1997. Small area estimation is another field which has been of special interest to Professor Ghosh

up to the present day. A major work which falls under this category is the monograph published by Chapman & Hall in 1997, entitled *Bayesian Methods for finite population sampling*, which Professor M. Ghosh co-authored with G. Mideeden. The book deals with the latest modes of applying Bayesian inference to the survey sampling method widely used by statistical offices organizations conducting consumer market research and public opinion polls. Professor Ghosh's works on small area estimation use Bayesian estimation methods along with other methods of statistical inference, which are of great significance in economic research. Let us stress the fact that Professor Ghosh's merits were honoured by awarding him the *Small Area Estimation Award*. The actual range of Professor Ghosh's scientific output exceeds these areas of research mentioned here because his articles also concern issues like reliability theory and non-parametric inference, which is a valued tool in the statistical analysis of economic data. Besides, Professor Ghosh devoted many of his works to the problem of estimator admissibility. Professor Ghosh's scientific output, including his monographs, constitutes theoretical and methodological foundations for innovative approaches to statistical analyses in several disciplines - economics, medicine, technology and agriculture. This demonstrates the unusual versatility of his scientific output as an author or co-author of over 310 publications. His works are widely cited, most of them in journals from the prestigious list of the *Journal of the Citation Report*.

Many of Professor Ghosh's publications resulted from his work on at least 30 research grants. Those projects were financed by such prominent institutions as *The National Science Foundation*, *The United State Army Research Office*, *The US Census Bureau*, *The National Institute of Health* as well as *The United State Center for Disease Control*. Professor Ghosh has participated in 150 prestigious international conferences. He has generously shared his knowledge also through editorial activities - as an editor or associate editor of 20 scientific journals, world-wide, among them as a member of the Editorial Boards of the following journals: *Sequential Analysis*, *Communications in Statistics*, *Statistics in Transition*.

Professor Ghosh's merits and academic prestige are recognized on the statisticians' international forum, which is corroborated by his involvement in international scientific bodies. For example, he was an elected fellow of *The American Statistical Association*, *The International Society for Bayesian Analysis*, *The International Statistical Institute* and *The Institute of Mathematical Statistics*. The statisticians' community expressed their admiration for Professor Ghosh's scientific achievements organizing in his honour a conference at the *University of Maryland*. It is worth emphasizing that Professor Ghosh's extraordinary personality, his knowledge and generosity, as well as his scientific ideas along with creative problem-solving approach, have inspired over sixty people to write their PhD dissertations under his supervision.

It is also noteworthy that in his scientific itinerary across the world Professor Ghosh have not forgotten about his native Indian roots. The *International Indian Statistical Association* honoured his merits in this field by granting him the Lifetime Achievement Award in 2017.

The aforementioned examples of Professor Ghosh's scientific activity give us a sense of pride in the fact that it was him that on many occasions participated in scientific conferences organized in Poland. Four times he was an invited lecturer at the conference on "Survey sampling in economic and social research" organized by the *Department of Statistics, Econometrics and Mathematics of the University of Economics in Katowice, in collaboration with the Polish Statistical Association*. In 2012 he was hosted as a special invited speaker at the *First Congress of Polish Statistics* held on the occasion of the one hundredth anniversary of the foundation of the *Polish Statistical Association*. At the same congress, Professor Ghosh was honoured with the Jerzy Neyman Medal. In 2014 as an invited speaker, Professor Gosh read a paper at the conference *Small Area Sampling* organized by *University of Economics in Poznań and International Association for Survey Statisticians*. During that Conference, he was invited to join the *Editorial Board of Statistics in Transition*.

Professor Ghosh's academic profile needs to be supplemented with his uncommon personality traits. He has always been an extremely outgoing, generously knowledge-sharing person and kind person, ready to offer good advice, and happy about an opportunity to do it. His commitment to science is simply part and parcel of his life. And can serve as a role model for us all, not only for statisticians. Professor Malay Ghosh is a prominent member of the world league of scientists. In view of this, the Senate of *University of Economics in Katowice* was fully justified in initiating the proceedings to award the honorary doctor's degree of this *University* to Professor Malay Ghosh in recognition of his outstanding achievements in the field of statistics and its applications, as well as his commitment to promoting science and international scientific cooperation.

Prof. Janusz Leszek Wywiał, Ph.D.