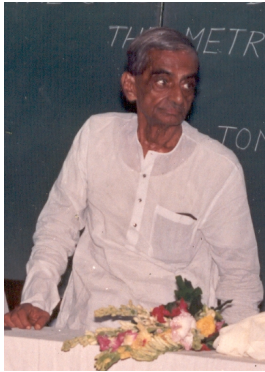# PROF. M. C. CHAKI
and
M. C. Chaki Centre for Mathematics and Mathematical Science, Calcutta

Prof. M. C. Chaki (full name: Prof. Manindra Chandra Chaki), was born in 1913 on the 1st of July at The town of Bagura, now in Bangladesh.

School education:

(i) Jamalpur Govt. School, Mymensingh (Bangladesh).

(ii) Gaibandha High School, Rangpur (Bangladesh).
He matriculated in 1930 from Gaibandha high School.

College education:

(i) Bangabasi College, Calcutta (I.Sc.) during 1930-1932.

(ii) Rajshahi Govt. College (B.A.) during 1932-1934 with Mathematics (Hons.) and Sanskrit (Pass).

University education: Got his M.A. degree in Pure Mathematics from Calcutta University in the year 1936.

Service life:

(i)   Lecturer in Mathematics, Bagura College (1939-1945).

(ii)   Lecturer in Mathematics, Bangabasi College, Calcutta (1945-1952).

(iii) Lecturer in Pure Mathematics dept. of Calcutta University (1952-1960).

(iv)   Reader in Pure Mathematics dept. of Calcutta University (1960-1972).

(v)   Sir Ashutosh Birth Centenary Professor of Higher Mathematics (1972-1978).

Cebrated Research Papers:

1. *On a non-symmetric harmonic space* (Bull. Cal. Math. Soc., 1952). In this paper the example of an n-dimensional simply harmonic space is given, which is not symmetric. The paper was of special importance because it was published at a time when there prevailed various conjectures in this regard. Due to this reason the paper has found reference in the book "**Harmonic spaces**" by A.G.Walker and H.S.Ruse.

2. *On conformally symmetric spaces* (Ind. Journal of Maths., 1963). This paper had great impact on the research workers of differential geometry. The Polish and the Japanese schools, which are the most active schools in differential geometry subsequently published a large number of papers on this type of space. Recently this type of space has been found to be useful in general relativity. Some important contributions have been made on this type of relativistic manifold by research workers in U.S.A., U.K., Canada, Russia, Belgium and other countries.

3. *On pseudo symmetric manifolds* (Anatele' Stint Univ. Al Cuza Iasi, 1987). In this paper a new type of differential geometric structure called Pseudo symmetric structure was introduced. An n-dimensional manifold with this structure is denoted by (PS)n. In literature this has been reffered to as a *Chaki (PS)n* or briefly a *Chaki manifold.* Some important contributions have already been made in Hungary and Jugoslavia dealing

with such manifolds. Recently this type of manifold has been used in general relativity. A paper of Prof. Chaki with one of his students dealing with such a relativistic space-time has been published in the International Journal of Theoretical Physics (IJTP, 1996).

4. *On quasi Einstein manifolds* (Publicationes Mathjematicae,Debrecen,2000). This paper is the fruit of Prof. Chaki's continous research on relativistic manifolds. In this paper the Ricci tensor has a structure that reduces to the usual Einstein manifold structure in a special case. An n-dimensional manifold with this type of structure is denoted by (QE)n. Such type of manifolds are found to be useful for studying perfect fluid spacetimes of general relativity. In his quest for studying other types of fluid spacetimes, Prof. Chaki has subsequently generalized the concept of (QE)n and the work has been published in Publicationes Mathematicae, Debren in the year 2001. He is currently working on further generalization of such type of spacetimes.

Honours and Distinctions:

A 'Teacher of Eminence' of the University of Calcutta, Prof. Chaki is aqmember of the Editorial Board of the internationally reputed journal 'TENSOR'. A geometer of international fame, he is at present not only the seniormost active mathematician of India but is probably one of a few senior active mathematicians of the world.

It is remarkable that even at the age of 90 he continues to guide research, inspire students of mathematics ande participate in various activities meaqnt to widen the scope of mathematics. Currently a research project sanctioned by the Govt. of India is running under his advice at the Calcutta Mathematical Society.

M. C. Chaki Centre for Mathematics and Mathematical Sciences:

This centre, with the purpose of advancement of mathematics teaching, learning and research was set up by the students and admirers of Prof. M.C.Chaki and was named after him as a mark of respect to him. The centre3 was officially inaugurated on July 13, 1996 at the Vidyasagar hall of Asiatic Society, Calcutta. The centre is currently housed at its office at 8 Jadav Ghosh Road, Calcutta.

Among the various objects of the centre, a few are as follows:

1. To promote pedagogic and other research in Mathematics and Mathematical Sciences.
2. To publish a Journal containing research articles on Mathematics and Mathematical Sciences.
3. To arrange lectures by experts as well as by researchers on topics of Mathematicsw and Mathematical Sciences for the meaningful interaction between M,athematics and other Sciences.
4. To arrange for translation of important papers published in foreign languages into English language.
5. To arrange for the guidance of suitable private students for doctorate degrees.

The centre has organized a few national level seminars and symposia till date. The first International Symposium organized by the centre was held in Calcutta during February 5-7, 2003 to celebrate the 90th birthday of Prof. Chaki.

Dr Sarbari Ray-Guha