

A Journey of the Department of Physics through the sands of time

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In the middle of 1989, when I joined St. Edmund's College as a P.U. Sc. Student, little did I realize that I would be writing the history of a famous department of the college of which I am also part of that history. On the occasion of the Centenary Celebration of the college, therefore it is a joy and honour for me to present the history of the Department of Physics of the college through this small article.

Introduction: St. Edmund's College, Shillong was established in the year 1923. The Deptt of Physics was started in the year 1937 with the introduction of Intermediate (Pre-University) classes. Mr. Kavindra Das was in charge of the department. Mr. Das left the college after two years to start a secondary school at Lumding. Akshayananda Bose came to replace Mr. Das. In 1941 Prof N. Ganguli joined the college to replace Mr. Bose. He was the only lecturer in the department, while Mr. Purnendu Bhattacharjee was the only demonstrator in the department; later in 1959 he left for Sagar University to complete his Master degree in Physics taking a lien from the college and joined the department again in 1961 as a lecturer. In his place, Prof S. K. Bhattacharjee was appointed as demonstrator but later in 1963 he was shifted to the Mathematics Department. Ms. Dolcy Milian, another active young lady, joined the department in 1963, in place of Prof S. K. Bhattacharya as a demonstrator.

Degree classes with Physics as Honours subject were introduced from 1959. Only three students were admitted in the class, they were Probal Purkayastha, Bro. Shannon and Bro. Donnelly. The laboratory instruments and apparatus were of very high quality and were mostly foreign products. Prof Brojamohan Goswami joined the department in 1961 and in 1964, Prof Kaluda. P. Bhattacharjee, Prof. Dulal Bhattacharjee and Brother Shannon joined the department. Later Brother Shannon became the Principal of the College. After the opening of degree classes, few lecturers were given appointments in the Physics Department. They were Profs A.L. Biswas, Ashok Dam, Eva Bhuyan, Minoti Sharma, and N. Kakoti. In the course of time Topeswar Singh, Mr. Jagadish Purkayastha and Mr. Ashit Baran Chakravarty were appointed in the department as demonstrators. A new building was constructed in the early part of the sixties for Physics laboratory and classes. The first floor was meant for Pre-university and degree laboratories and the ground floor for the classes. Ram Bahadur was appointed in 1969 as laboratory assistant in the department for laboratory maintenance and assistance. The Department of Physics has established itself to be one of the best in the region. In the year 1972, Prof. Ganguli, the man who can be rightly considered as the father of the full fledged Physics department retired and his lieutenant, Dr. Purnendu Bhattacharjee, took over the reins of the Department.

About the Father of the Physics Department: Late Prof N. Ganguli can be rightly considered as the father of the Physics Department of St. Edmund's College. Before he joined the College he was a research fellow in the Indian Association for Cultivation of Science in Calcutta under the guidance of the renowned scientist Prof. K. S. Krishnan, F.R.S. for several years and published a few papers in famous world journals. One of his publications in the Proceedings of the Royal Society, 1941 was rated as the best work of the year. Prof Ganguli had planned to write his thesis for the degree of Doctor of Science,

but due to his acute family problem he had to look for a job and finally landed in St. Edmund's College. It was a Godsent for the college. He built the department from almost scratch and under his care; the department grew in size with respect to the number of students as well as the number of teachers. Prof N. Ganguli being an experimental physicist believed that teaching science must not depend on dry lectures but must be fully supported by experimental demonstrations. It was because of this reason that he had equipped the laboratory with high quality instruments and the money was not a problem as the College authority was highly cooperative with him. Thus through his untiring effort and dedication, the Department of Physics became one of the best in the region.

Many academicians held Prof. Ganguli in high esteem for his perseverance and success in building the department from scratch. In 1959, Prof. Mahanto, The Head of Physics Department Guwahati University praised Prof Ganguli for having the capability and mettle to start the Honours course in Physics immediately after the introduction of the degree course in Physics, which was unthinkable at that time. In the words of Bro M. D. Curran of the English Department, "Prof Ganguli rose to the challenge". When C.V. Raman, visited the college in 1951, at the reception presided over by the then governor of Assam, Raman praised Ganguli acumen as a working scientist.

Prof N. Ganguli developed a habit in the teaching staff of the department to remain in the department for the whole day and thus a co-operating atmosphere was created amongst the faculties of the department. It was a general practice in the department to go to the class on time and if anybody is late or absent, another teacher would go to the class. Probably due to these reasons, the results of the department, both in Pre-university and Degree examinations were always excellent. The current teaching staffs of the department who are the great t great....grand products of Prof N. Ganguli are greatly indebted to this man. What surprised all was that Prof Ganguli taught Botany on a part-time basis in St. Anthony's College and for six years in the Botany department of St. Edmund's College due to the vacancy in the department. Besides being the teaching faculty, Prof. Ganguli was also a superintendent of one of the hostels of the college, the New Hostel. Thus the greatness of this man is manifested in the success and fame of the Department of Physics, St. Edmund's College over the years. He passed away in 1992.

The Post Ganguli era: After the retirement of Prof. Ganguli in 1972, Late Dr. P. Bhattacharjee took over as the HoD. The current HoD, Dr. M. Lyndem was privileged to have been taught by this Dr. P. B as he was fondly called. Prof P. B was successful to run the Department by his gentle and sympathetic attitude towards all the members of the staff and was able to gather the respects from colleagues and students till his retirement in 1995. Dr. P. B was always well dressed and used to address the students by the word "Gentlemen", this he did in order to imbibe the spirit of responsibility and respect amongst his students. Prof Wandel Passah joined the department in 1974 to fill the post of Prof N. Ganguli, but in 1982 Prof Wandel Passah and Late Prof Dulal Bhattacharjee joined the newly created Department of Electronics. In 1974, Dr. Kishorri Mohan Pathak, a renowned Professor of Physics in Guwahati University visited the college and wanted to start a Cosmic Ray Research Centre in the college with Prof B. M. Goswami and Prof K. P. Bhattacharjee as co-worker but this could not materialize due to some technical difficulties related to the Universities rules.

In 1977, Bro Shannon left the department to become the Principal of the college. Bro Davis, an excellent and good Physics teacher also joined the Department in 1978 but he left for further studies abroad in 1991. Dr. Radhendu Das along with Late Dr. Ramendu Bhattacharjee joined the college in

1986, but Dr. Ramendu left the college to join the Department of Physics, Assam University in 1997, in his place the current Head, Dr. M. Lyndem joined the college. Dr. V. R. Rao and Dr. S. Khatri joined the Department in 1991, but Dr. S. Khatri left for the North Eastern Hill University in 2005. In 2001, Prof B.M. Goswami retired and Dr. L. Kurbah joined in his place. Again in 2004, Prof K. P. Bhattacharjee retired and in 2005, Dr. R. Roy joined the department in his place. Subsequently in 2006, Prof. B. L. Giri joined the department against the vacancy of Dr. S. Khatri. An inflection point in the history of the department was created when the two stalwarts of the department, Dr. R. Das and Dr. V. R. Rao retired in the same year 2022. The two permanent sanctioned posts were converted to contractual posts as a result of which the current head had to lead a mixed team of permanent and temporary young faculties which is a huge challenge.

There were also some faculties who were appointed for short periods of time. Those were Amalendu Das who had worked in the department from June 2005 to July 2009; Ms. Doreen Anabell War who joined in 2009 against the vacant of Dr. L.Kurbah, and Mr. Reagy Surong, who joined in 2009 against the vacancy of Dr. R. Roy but later the post was transferred to other department and R. Surong joined the Higher Secondary Section of the College. Mr. Nabendu Deb and was also appointed for a short duration in 2009. Later on when the semester system was introduced, Guest faculties were also appointed whose names are mentioned in the chronology below.

Below is the **chronology** of the different staffs of the department since inception till today

The Heads	Years of service as Head	The Faculties	Years of service
Prof. N.Ganguli	1941-1972	Bro. M. G. Shannon	1964-1977
Dr. P. Bhattacharjee	1972-1995	Prof. Dulal Bhattacharjee	1964-1982
Prof. B.M. Goswami	1995-2001	Prof. Wandel Passah	1974-1982
Prof. K.P.Bhattacharjee	2001-2004	Bro. Davis	1978-1991
Dr. Radhendu Das	2004-2022	Dr. Ramendu Bhattacharjee	1986-1998
Dr. V. R. Rao	Feb/2022-May/2022	Dr. S. S. Khatri	1991-2005
Dr. M. Lyndem	May/2022 till date	Dr. R. Roy	2005-2009
		Dr. L. Kurbah	2001-till date
		Prof. B. L. Giri	2006-till date
		Dr. M. Ram	2022-till date

The Guest Faculties	Years of service	The Demonstrators	Years of service
Mr. Rana. K. Kshiar	2015-2016	Dr. P. Bhattacharjee	1937-1959
Ms. Rupali Paul	Aug, 2016 - April, 2018	Prof. S. K. Bhattacharjee	1959-1963
Mr. Abhishek Thapa	June 2018 – Dec, 2020	Mrs. Dolcy M. Kharbuli	1963-2003
Dr. I Sawkmie	Sept, 2021- Feb 2023	Mr. A. B. Chakravarty	1966-1998
Dr. Smriti Adhikari	May, 2022 - Feb, 2023		
Mr. Larry. K. Nongbet	February, 2023 till date		
Mr. Dashanskhem Nongkynrih	March 2023 till date		

The Lab Assistants	Years of service
Ram Bahadur,	[1969-1989] Died
Phillapson Marak	[1983-1992] shifted to Library
Atul Kar	[1989-till date]
Ram Bahadur	[1990-2014]Died
Ibhalang Pyngrope	[2016-2020] shifted to the Electronics Department.

The passing away of Ram Bahadur, in 2014 during his service had crippled the functioning of the department laboratory for quite some time, even after replacement; still the department understood that it was a major loss to the faculties and most importantly the students during the practicals. He was such a very sincere and knowledgeable Lab attendant who was well versed with experiments and equipment. During the practicals he was more like a teacher than a lab attendant. In his place, Ibhalang Pyngrope was appointed in his place, but in 2020 he was shifted to the Electronics Department.

Visits by Eminent persons and Scientists: The Department was fortunate to have been visited by none other than the tallest man of physics in India, the *Nobel laureate, Sir C.V. Raman*. He had visited the college and inspected the Department laboratory in the year 1951-52; and after him many other distinguished scientists and eminent persons have visited the Department in different times and till today. Those include: *Prof. M.G. K Menon* a renowned Nuclear Scientist, former Scientific Adviser Govt. of India, who visited in 2006 and delivered a popular lecture on Cosmic Rays. In 1974, a renowned Physicist and the former Vice Chancellor of Gauhati University, *Prof. K.P. Pathak*, visited the Department. A distinguished Physicist *Prof. Subal Kar*, (ex-student) who is the ex Head of the Department Institute of Radio Physics and Electronics (IRPE), University of Calcutta, had visited the department on the 13th of May, 2010 in connection with an invited Guest Lecture organized by the Department. *Prof. Amar Jyoti Choudhury*, Pro. V.C, Tezpur University, and Ex. V.C. Gauhati University, had visited the department on the 1st of July, 2010 in connection with an invited Guest Lecture organized by the Department. *Padmashri Dr. Chaitanyamoy Ganguly*, International Atomic Energy Agency, Vienna, Austria had visited the department and present a talk in the college on the Topic: “Prospects and Challenges of Nuclear Power and Related Cycle” in 2012. And there are many more guests whose names are not included here as the list will become endless.

Achievements: The year 2009 was yet another important landmark year for the department as it was one of the six departments selected in the college under Star College Scheme of The Department of Biotechnology, Ministry of Science and Technology, Government of India. The scheme had provided a major boost for the upgradation of the lab and the honors class room had been upgraded into an ICT enabled classroom. Under this scheme many programs and activities were organized by the department; to name a few, a three day *National workshop on “Computer Interfacing of Physics Experiment”* was organized from 11th to 13th May 2009 in collaboration with Inter University Accelerator Center (IUAC) New Delhi; a *State Level Workshop on “Experimental Demonstration of Basic Concepts of Physics”* held on the 9th and 16th July, 2011. Study tours, Outreach programs, etc were also conducted.

The *excellent performance* by the students in the University Examinations in many years has been another achievement and the tradition and pride of the department. Almost every year, the top position in

the merit list is secured by the students of our Department. In 2015 *Mr. Migranko Bastav Chakraverty* was awarded the Gold Medal by NEHU for securing First position in B.Sc. (Honors) Physics examination and scoring the highest marks amongst all toppers in Science stream. Almost every year many of our students clear the JAM and GATE exams and join the IITs and complete their masters and PhD from these institutes even from abroad.

Major Initiatives started by the Department: Other milestones in the history of the department were the new initiatives undertaken by the department and they are worth mentioning here. Those are: the (1) *Student's seminar*: This Students' seminar was started in the year 2007 at the initiative of Dr. M. Lyndem, which was the first of its kind amongst the undergraduate colleges of NEHU. The seminars are compiled yearly in a booklet form. Currently, Prof. B.L. Giri is in charge of this program. (2) *The Department Library*. This Departmental library caters to the needs of Physics Honours Students. (3) *Late Prof. Ganguly Memorial Award*. This award was instituted and introduced from the academic year of 2012-13. This award is given in memory of Late Prof. N. Ganguly to the student of Physics Honours students of the college who secures the highest marks in Physics in the Final Year University examination in that particular Year. The first Award was conferred on Mr. *Suman Deb* on the 4th of December, 2012, for having secured the highest marks in Bachelor of Sciences, in Physics in the University Examination, 2012, among the graduating students of the College. And in successive years the presentation of this award has continued. (4) *The Departmental Magazine EDPHYSICA*. It was first published by the Department of Physics in 2007 as a Newsletter under the name *EDPHYS*. It consisted of write ups and articles by faculty members and the students of the Department of Physics. Dr. R. Roy was the first Teacher-In-Charge of this Newsletter. After Dr. R. Roy left the College, Dr. L. Kurbah took over the charge and became the editor of this Newsletter.

In conclusion, I can say the Department of Physics has been bubbling with activities and is the *pride* and *prestige* of the college throughout the years due to the efficiency, dedication and commitment of the faculties and staff of the department. Let's hope that this will continue in the years to come.

Long live Physics Department– Long live St. Edmund's College.

