

In This Issue...

A NEW BEGINNING	1
আমার বাবার জীবনী	2
MY EXPERIENCE IN PRAGUE	4
IEST SHIBPUR STUDENTS SHINE IN INTERNATIONAL HARDWARE DESIGN CONTEST	5
GLOBAL WARMING: POTENTIAL PROBLEMS AND POSSIBLE SOLUTIONS	6
ART WORK	10
GAABESU ELECTION	11
EMERGENCY FUND APPEAL	12
GUIDELINES FOR PUBLISHING ARTICLES IN ALUMNI LINK	13
OBITUARIES	14
COLLABORATION BETWEEN UWINDSOR AND IEST, SHIBPUR	16


*Editorial***A NEW BEGINNING**

For the first time in the history of the Global Alumni Association, an election was held to decide the 27 members of the Executive Committee. It was a fair election and the elected committee has a good representation across various batches.

This period also marked the sad demise of Dr. Dhruva Nath Roy, ex Professor and Head of the Mechanical Engineering Department who was one of the stalwarts in his area.

The Research Complex at the Centre for Healthcare Science and Technology and Tagore Centre for Green Technology Business Incubation, supported by National Science and Technology Entrepreneurship Development Board, Govt of India, was scheduled to be formally inaugurated by Shri Prakash Javadekar on 12th August at IEST Shibpur campus but has been postponed because of illness of Hon'ble Minister of HRD.

We also cover the experiences of some of our current students who travelled all across the globe to present their research work. The college has come a long way!

We hope you will enjoy reading this edition!

Alumni Link | Editorial Team**Sandeep Chatterjee | 98 ME****Soham Mitra | 15 CE**



আমার বাবার জীবনী

Debanjan Ray | 1985 EE

ধ্রুব নাথ রায় ; জন্মঃ ১৭ই এপ্রিল ১৯৩১; মৃত্যুঃ ১৭ই অগস্ট ২০১৭

আমার বাবা ধ্রুব নাথ রায়-এর জন্ম বাংলাদেশের ঢাকা শহরে। আমার প্রপিতামহ কালীভৈরব রায় ছিলেন ময়মনসিংহ জেলার চাড়াপাড়া গ্রামের জমিদারের প্রতাপশালী নায়েব। আমার পিতামহ হেমেন্দ্রনাথ রায় ছিলেন পাঁচ ভাই ও দুই বোন। প্রথমে তারা ঢাকার হুসাইনি দালানে বাড়ী তৈরী করেন। পরবর্তীকালে কায়েরটুলির বিধানপল্লীতে বাস করা শুরু করেন সেখানে অনেক ব্রাহ্ম পরিবার এক সাথে বাস করতেন। দেবালায় নামে এক মন্দিরে নিয়মিত ব্রহ্মোপাসনা হত। ছোটবেলার সেই উপাসনায় নিয়মিত যোগদানের প্রভাবে বাবা ছিলেন মনে প্রাণে ব্রাহ্ম।

বাবার পড়াশুনা ঢাকার নবকুমার স্কুলে। আমার পিতামহী সুনীতিবালা রায়ের কাছেই আমার বাবা ও তার তিন দিদি কনিকা মনিকা স্মরণিকা স্কুলের প্রাথমিক পাঠ পেয়েছিলেন। শুনেছি বাবাকে মুখে মুখে অঙ্ক শেখাতেন।

বাবার মুখে সেই যুগের বাজার দরের ঢাকার বিখ্যাত নানান মিস্ত্রি আর এতরকম মাছের নাম শুনেছি যে আজকের দিনে তা অবিশ্বাস্য মনে হয়। আমাদের পরিবারে অতিথের্যতার খুব প্রচলন ছিল। যতদিন সক্ষম ছিলেন নিজের হাতে বাজার করে অতিথিদের খাইয়ে আপ্যায়নের সেই ধারা বহন করে গিয়েছেন।

আমার পিতামহের খুব আসবাবপত্রের সখ ছিল। ঘরে যখন মিস্ত্রী দুপুরবেলা কাজ করত আর আমার ঠাকুমা দুপুরবেলা ঘুমিয়ে থাকতেন তখন মিস্ত্রীদের যন্ত্রপাতি নাড়াচাড়া করে ছোটখাটো জিনিষ বানিয়ে ফেলতেন। বাবার সেল অফ ডাইমেনশন ছিল অসাধারণ। একবার দোকানে খাবার টেবিল দেখিয়ে দোকানী বলে সেটির মাপ পাঁচ বাই তিন ফুট। বাবা ঘাড় হেলিয়ে দেখে বলেন হতেই পারে না। লম্বায় দু এক ইঞ্চি কম আছে। মেপে দেখা গেল দেড় ইঞ্চি কম।

ফিরে যাই আবার ঢাকাতে। বিধান পল্লীর কাছেই কুলবেড়ী স্টেশন। সেখানে অবাধ চোখে ইঞ্জিনের চলা দেখতেন আর মেশিন আর তার মেকানিক্সের এর প্রতি জন্মায় দুর্নিবার আকর্ষণ। পরবর্তী কালে সেই উৎসাহ আর জ্ঞান অর্জনের ইচ্ছাই তাকে টেনে আনে শিবপুর বেঙ্গল ইঞ্জিনিয়ারিং কলেজে পড়ার জন্য।

বাবার অনুপ্রেরণা ছিলেন ঢাকার নবকুমার স্কুলের যামিনীকান্ত জাওয়াড় নামে এক লিজেঞ্জারি ম্যাথমেটিশিয়ান যার প্রভাবে স্কুল ফাইনাল পরীক্ষায় ১৮ বারের মধ্যে ১৬বার প্রথম হত নবকুমার স্কুল। নবম শ্রেণীতে ওঠার সময় যামিনীবাবু বাবাকে ডেকে প্রশংসা করে বললেন যে বাবা কেবল অঙ্ক প্রথম হননি, তিনি প্রত্যেকটি অঙ্ক বিশদভাবে ব্যাখ্যা করেছেন।

বাবা ম্যাট্রিকুলেশন পাশ করেন ১৯৪৭তে। পরীক্ষায় ঢাকা বোর্ডে অষ্টম স্থান। সেই বছরেই শুরু হয় ভয়ঙ্কর দাঙ্গা। বাবার মনে ছিল দেশ ছাড়ার কষ্টকর অভিজ্ঞতা। মানুষ মারামরি করছে ট্রেনে ওঠার জন্য। ঠাকুমা পক্ষঘাতে শয্যাশায়ী। বাবা বুদ্ধিকরে মিলিটারি কামরায় পরিবারের সকলকে নিয়ে উঠে শিলিগুড়িতে পৌঁছে সেখানেই বসবাস শুরু করেন। বাবার তিন দিদি ছিলেন স্কুলের শিক্ষিকা। বাবা দার্জিলিং-এ ম্যাজেশিয়ান কাকা যতীন্দ্রনাথ রায়ের কাছে থেকে সেন্ট জোসেফ কলেজ থেকে আই এস সি পাশ করেন। সেই সময় পারিবারিক অবস্থা সচ্ছল ছিল না। সব প্রতিকূলতাকে মনের জোরে পার করতেন। এলার্ম ঘড়ির অভাবে ভোরে উঠে পড়তে বসার জন্য দার্জিলিং এর শীতে পাতলা চাদর গায়ে ঘুমাতেন। ভোরবেলায় শীতের প্রকোপে ঘুম ভেঙ্গে যেত। পকেটে পয়সা না থাকায় বাড়ি থেকে পৌনে তিন মাইল দূরে কলেজ যাওয়া আসা হেঁটে। বাসে চড়া কেবল সেই দিন যেদিন হোতো প্রবল বৃষ্টি।

সেন্ট জোসেফ কলেজে তখন ম্যাথমেটিক্স আর এস্ট্রিমির দিকপাল শিক্ষক ফাদার গোরে। তার বিশেষ মেহাজন তিনি। অসুস্থতার জন্য বাবা কিছুদিন কলেজে যেতে পারেননি। সুস্থ হয়ে ক্লাসে ফিরে আসলে পরে ফাদার তাকে বুকে জড়িয়ে ধরে বলেন - ওহ রয়! ইউ হ্যাভ কম ব্যাক। এই ঘটনাটি বাবাকে বিশেষ ভাবে আত্মতৃপ্ত করে।

১৯৪৯ সালে সেন্ট জোসেফ কলেজের পালা শেষ করে এবার বি ই কলেজে মেকানিক্যাল ইঞ্জিনিয়ারিং পড়ার স্বপ্নপুরনের পালা। অর্থাভাব বাধা হয়ে দাঁড়ালো। বাবার বন্ধু প্রদ্যুত কুমার দত্ত পরামর্শ দেন যে পড়তে শুরু করে ভাল ফল করলে পরে স্কলারশিপ পাওয়া যাবে। পেয়েওছিলেন। বি ই কলেজের এনট্রেন্স পরীক্ষায় বাবা অঙ্ক উচ্চতম মার্ক্স পান। বাবার অঙ্কের বিশেষ দক্ষতার কথা ছড়িয়ে গেল ছাত্র বন্ধুদের মধ্যে। সবাই ভীড় করে আসত অঙ্ক বুঝতে। বাবা বলতেন ইঞ্জিনিয়ারিং এর ভিত হল অঙ্ক। অঙ্কে ফাঁকি দিয়ে ইঞ্জিনিয়ার হওয়া চলবে না।

এই অঙ্ক প্রসঙ্গে একটা কথা মনে পড়ে গেলো। আমি তখন ক্লাস ১২-তে। অঙ্ক আটকে গেলেই বাবার কাছে যেতাম। বাবা ছিলেন রাশভারী। একটু ভয়ে ভয়েই যেতাম। প্রথমে জিজ্ঞাসা করতেন - নিজে চেষ্টা করেছো? আমি হাঁ-নার মিশ্রিত জবাব দিতেই খাতাটা টেনে নিয়ে অবলীলাক্রমে সমাধান।

কিন্তু কদিন পরে বললেন - তোমাকে পাঠাচ্ছি অঙ্কের আরো এক পন্ডিতির কাছে - আমাদের কলেজের ডঃ রসজিত বেরা, ম্যাথস ডিপার্টমেন্টের। অঙ্কে B. Sc. আর M. Sc.-তে first class first।

আমি ডঃ বেরার কাছে গেলেই কঠিন অঙ্ক দিতেন B. Sc-র অঙ্ক বই থেকে। আর বলতেন - এটা তো খুব সোজা। কি ভাবে চিন্তা করছো? আমি একটু চেষ্টার কথা বলতেই বলতেন আরো একটু চেষ্টা করো। আমি হতাশ হয়ে বাড়ী ফিরতাম ও মাকে অভিযোগ করতাম। কদিন পরে শুনি মাকে চুপি চুপি বাবা বলছেন - রসজিত-কে আমিই বলেছিলাম spoon feeding না করতে, শক্ত অঙ্ক দিতে, চিন্তা ও চেষ্টা করতে শেখাতে।

বাবা বিশ্বাস করতেন শিক্ষক যা পড়াচ্ছেন, ছাত্রকে তার থেকে বেশি জানতে হবে। সেটা কি ভাবে? একটাই উপায় আছে। কঠোর পরিশ্রম। একবার বি . ই. কলেজের প্রিন্সিপাল ডঃ S. R. Sengupta-র ক্লাসে একটা অঙ্ক করান প্রায় ৪৫ মিনিট ধরে, 3rd year-এর ক্লাসে। আমার বাবা ব্ল্যাক বোর্ডে গিয়ে স্যারকে বললেন - এর থেকে অনেক সহজে হয়ে যাবে, বলে বোর্ডে পাঁচ মিনিটে সমাধান কমে দেখান। বলা বাহুল্য, এতে কিন্তু ডঃ সেনগুপ্ত বাবার উপরে বিশেষ প্রসন্ন হননি। বাবা এই নিয়ে অনেক অনুতাপ করেছেন। বলেছেন - আমার উচিত ছিলো স্যারের ঘরে গিয়ে আলাদা ভাবে বলা।

আরেকবার, আরেক প্রখ্যাত প্রফেসর second year-এর ক্লাসে বলেন - John Case-এর Strength of Materials বইটি অস্বীকৃত। বিষয়টি পরের বছর অর্থাৎ 3rd year-এ পড়ানো হবে। বাবা বইটি সাথে সাথে কিনে ফেললেন এবং ছুটিতে পুরো বইটি পড়ে শেষ করলেন। 3rd year-এর শুরুতে Strength of Materials পুরোপুরি নখদর্পনে।

১৯৫৩ সালে Gold Medal নিয়ে মেকানিক্যাল ইঞ্জিনিয়ারিং নিয়ে পাশ করেন। তখনকার দিনে বেশীরভাগ ইঞ্জিনিয়াররা সরকারি চাকুরী করা পছন্দ করতেন। বাবার ধারণা ছিলো সরকারী চাকুরী করলে কেবল ফাইল ঘাঁটাঘাঁটি হবে। প্রকৃত ইঞ্জিনিয়ার হওয়া যাবে না। তাই গেস্টকিন উইলিয়ামসে দু বছরের জন্য ও তৎপরে Telco-তে কাজ করেন। ১৯৫৭ সালে CSIR Fellow Scholarship নিয়ে USA-এর বাস্টিমোর শহরে Johns Hopkins University থেকে M. Sc. (Engineering) করেন। Fluid Mechanics-এর একাধিক Advanced level-এর কোর্স নিলেন। সেখানে Standard Vacuum Oil Company থেকে আরো এক Fellowship পেয়েছিলেন দু বছরের জন্য।

১৯৫৯ সালে দেশে ফিরে বি. ই. কলেজে lecturer হিসেবে শিক্ষকতা শুরু করেন। দেশে ফিরে আসার কারণ হিসেবে বলেছিলেন USA -এর প্রচণ্ড গতিশীল জীবন তার পছন্দ ছিলো না। আরো একটি কারণ ছিল যে বাবা বাংলা ভাষাকে ভীষণ ভালোবাসতেন। প্রসঙ্গত, বাবা বি ই কলেজের প্রবেশিকা পরীক্ষায় অঙ্ক ছাড়াও বাংলাতে সর্বোচ্চ নম্বর পেয়েছিলেন। বাবাকে দেখেছি বাংলা পরিভাষা নিয়ে গবেষণা করতে।

১৯৬০ সালে ২৫ শে মাসে আমার বাবা বিবাহ করেন, বিশিষ্ট ব্রাহ্ম অমিতাভ গুহের কন্যা ও প্রখ্যাত রজনীকান্ত গুহের পৌত্রী সুনন্দা গুহকে। ১৯৬১ সালে আমার দিদি শর্বাণী রায় ও ১৯৬৩ সালে আমার জন্ম হয়।

বি ই কলেজে প্রথমে মেকানিক্যাল Dept-এ join করে ১৯৬৩-তে চলে যান Applied Mechanics Dept-এ। সেখানে ৯ বছর Assistant Professor হিসাবে থেকে Mechanical Dept-এ প্রত্যাবর্তন ১৯৭২ -এ। মাঝে Ph. D. করেন Calcutta University থেকে ১৯৬৮ সালে প্রফেসর পরেশ চ্যাটার্জীর অধীনে।

বাবা, ডঃ পান্না পাল ও ডঃ S. P. Sen এই trio-র সংযোজনে বি ই কলেজের Thermodynamics হয়ে উঠলো সর্বসেরা - আই আই টি খরগপুর ও যাদবপুরকে ছাড়িয়ে। এর বুনয়াদ করেছিলেন অবিশ্বি প্রিন্সিপাল ডঃ এস আর সেনগুপ্ত যিনি গ্যাস টারবাইনের গোরাপত্তন করেন।

১৯৮৮ সালে বাবা বি ই লিখলেন Applied Fluid Mechanics, যেটা যুগপৎ প্রকাশিত হয় ভারতের East West Press এবং ইংল্যান্ডের Ellis Horwood publication থেকে। বিইএর সমস্ত ছবি বাবা নিজে হাতে ঐকিচ্ছিলেন কোনো draftsman-এর সাহায্য না নিয়ে। প্রকাশনার অল্প কদিন পরেই ব্যাস্কালোরের Indian Institute of Science-এ এবং আরো কিছু বিদেশী university-তে বইটি বেশ কয়েক বছর পাঠ্যপুস্তক হিসাবে পড়ানো হয়। অ্যাকাডেমী প্রেস Advances in Fluid mechanics-এর কিছু বিশ্বের প্রগতিশীল পেপার-এর সম্বলন করে, যার মধ্যে বাবার পেপার অন্তর্ভুক্ত ছিলো। বাবা বলতেন যে কোনো ভালো টেকনিক্যাল বই চালু থাকে খুব বেশী হলে সাত আট বছর। কিন্তু বাবার মৃত্যুর খবর পেয়ে বাড়ি যেতে মা দেখালেন পাবলিশারের কাছ থেকে রয়ালটির চেক এসেছে। প্রতি বছরই এসে থাকে। ২০১৬-১৭ অর্থনৈতিক বছরে বইটির বিক্রী হয়েছে ২১টি কপি। অর্থাৎ ২৯ বছর পরেও বইটি এখনো চালু।

বাবা বেশ কয়েকবছর Mechanical-এর Head of the Department হয়ে পরিসেবা করেছেন। কিন্তু বাবা Administration থেকে শিক্ষকতাকেই প্রাধান্য বেশী দিয়েছেন। বছর দু একের পরেই তিনি আবার পুরোপুরি শিক্ষকতায় ফিরে শান্তি পেলেন।

বাবা অবসর নেন ১৯৯৩ সালে। তাঁর সততা বোধ এতই প্রবল ছিলো যে অবসর জীবনের শেষ দিনের ঠিক পরের দিনই নিজের তৈরী বাড়ী কল্যাণীতে চলে আসেন সরকারী আবাসন ছেড়ে।

অবসর জীবন - কল্যাণী ছিল বাবার প্রাণ। বাবা যখন বাড়ী তৈরী করার পরিকল্পনা করলেন, সেটা রিভিউ করলেন বি ই কলেজের ৬ জন আর্কিটেক্টদের দিয়ে। গ্যারেজের দেওয়ালে খোদাই হলো মেকানিকালের গীয়ার। জমির বেশীরভাগটাই জুড়ে থাকলো বাগান। চাকরীজীবনে বাবাকে কোনোদিন খুব একটা ফুল ফোটাতে দেখেছি বলে মনে পড়ে না। কিন্তু কল্যাণীতে বাবা সেটা প্রফেসনাল পর্যায়ে নিয়ে গেলেন। বাবাকে দেখেছি দিনে সাত থেকে আট ঘণ্টা বাগানে কাজ করতে। প্রচুর গার্ডেনিং-এর বই কিনে পড়াশুনো, কল্যাণীর এগ্রিকালচার ও হটিকালচার ডিপার্টমেন্টের বিদ্বন্দের সঙ্গে আলোচনা আর অনলস পরিশ্রমের মাধ্যমে পেলেন একবার কল্যাণীর শ্রেষ্ঠ ফুলের বাগানের সম্মান। বাবার মৃত্যুতে কান্নায় ভেঙ্গে পড়ে মালী চন্দ্রমোহন বললো বাবার কাছ থেকে বাগান তৈরী করার শিক্ষা পেয়ে সে ধন্য।

বাগান করার পটভূমিকায় ছিল আমার পিতামহের স্মৃতি, যিনি ঢাকায় প্রখ্যাত এক বাগানের মালিক বলদার জমিদারকে হারিয়ে প্রথম পুরস্কার পেয়েছিলেন। আমার পিতামহের মতন বাবার সবচেয়ে পছন্দের ফুল ডালিয়া। ফুলগুলি ছিল বাবার সন্তানের মতন। তাদেরকে রক্ষা করার জন্য উঁচু করলেন পাঁচিল কাঁটা তারের বেড়া দিয়ে। হনুমান তাড়ানোর জন্য কিনলেন বিশাল বন্দুক। নাতি নাতনীদেব বিনোদনের জন্য বাগানে হোলো দোলনা, ফোন্ডিং সুইমিং পুল, লাল নীল গার্ডেন ছাতা। শীতের সময়ে প্রতি সপ্তাহান্তে কোনো না কোনো আত্মীয়-স্বজন বন্ধু-বান্ধব চলে আসতেন দিনের ছুটি কাটাতে। আমার জামাইবাবু মজা করে বলতেন তোমার বাবার রিসর্টে এক-দেড় মাস আগে রীতিমতো বুকিং করে আসতে হয়।

অবসর জীবন দুবছর কাটানোর পরে ১৯৯৫ সালে কল্যাণীর গভর্নমেন্ট ইঞ্জিনিয়ারিং কলেজের ফাউন্ডার প্রিন্সিপাল রূপে এক বছর পরিসেবা দেন। তৎপরে অবসরপ্রাপ্ত বি ই কলেজের অধ্যাপকদের নিয়ে একটা ফ্যাকালটিফোরাম গঠন করেন, যা বহু বছর ধরে তিনি পরিচালনা করেন। এই সংস্থার উদ্দেশ্য পশ্চিমবঙ্গের সুদূর গ্রামাঞ্চলের দৈনন্দিন সমস্যার সুলভ ও সহজ ইঞ্জিনিয়ারিং সমাধান।

২০০৫ সালে BESU অর্থাৎ Bengal Engineering and Science University, যা বি ই কলেজের অধুনা নাম, আমার বাবাকে "Distinguished Teacher" সাম্মানিক ভূষণ দেন।

বাবার স্বভাব - বাবা ছিলেন সং, ন্যায্যবান, মেধাবী, অনলস পরিশ্রমী, কর্মশক্তিপূর্ণ, স্বাধীনচিত্তাশীল, সাদাসিধে, গাষ্ঠীর্থপূর্ণ, তেজোময়, নির্ভিক, স্পষ্টবক্তা ও অত্যন্ত মিশ্রক প্রকৃতির। সততার ব্যাপারে বলতেন আমার নাম ধ্রুব আর ধ্রুব মানে ধ্রুব সত্য। প্রকৃত ব্রাহ্ম হতে গেলে প্রথম কথা সং হতে হবে কেননা সত্যমত্তমত্তম ব্রাহ্ম, আর অসত্যো মা সপদময়ো।

বাবার সখ - বাবার ছিল নানাধরণের সখ। কলেজে থাকাকালীন সপ্তাহান্তে নিয়ম করে খেলতেন তাদের ব্রীজ মধুসূদন ভবনের ক্লাবে। অনেকবার ব্রীজ চ্যাম্পিয়ান হয়েছিলেন।

দাবা খেলা - আমি বাবাকে দাবা খেলা শিখিয়েছিলাম। আমি বি ই কলেজে ইলেকট্রিক্যাল পড়ার সময় খানিকটা তালিম নিই একদা স্টেট চ্যাম্পিয়ান ও গ্র্যান্ডমাস্টার দিব্যেন্দু বড়ুয়া ও নিরজ মিশ্রের কোচ শ্রদ্ধেয় শ্রীকুমার মল্লিকের কাছে। দাবাতে কলেজ চ্যাম্পিয়ানকে আমি হারিয়ে দিয়েছিলাম প্রতিযোগীতায় অংশ না নিয়ে। বাবা তখন আমার সঙ্গে খেলতে লাগলেন। অল্প কদিন পরের থেকে বাবা আমাকে হারিয়ে দিতেন। আমার গর্ব গেলো ভেঙ্গে।

দোল উৎসব - আমরা ছোটবেলার থেকে দেখেছি যে ছোটরাই দোল খেলতো। আর বড়রা দরজা এঁটে ঘরে বসে থাকতেন। বাবা শান্তিনিকেতনের বসন্ত উৎসব দেখে উত্ত্বুদ্ধ হয়ে একবার প্রায় সমস্ত অধ্যাপক সহকর্মীদের জোর করে বাড়ীর বাইরে টেনে এনে রঙ মাখালেন। সপরিবারে চালু করলেন দোল উৎসব। সবুজ মাঠে আবার সহ নাচ-গান আর তারপরে খিচুড়ী ভোগ। অবসর জীবনে এসে কল্যাণীতেও সেই সংস্কৃতি চালু করলেন।

ভ্রমণ বিলাস - বাবা, মা দিদি ও আমি প্রায় প্রতি বছরই পুজোর সময় বেড়াতে যেতাম। পছন্দের তালিকায় প্রথম ছিলো পাহাড়। একবার আমরা উটি বোটানিক্যাল গার্ডেনে বেড়াতে গিয়ে বাবা নিজেকে ফুলের বাগানে নিজেকে হারিয়ে ফেললেন। বহু ঘণ্টার অপেক্ষার পরে বাবার হোলো হুস্টচিন্তে প্রত্যাবর্তন।

ইংরাজি ভাষাচর্চা - অবসর জীবনে বাবা ডিক্সনারী ও ইংরাজি ভাষাচর্চা নিয়ে ব্যস্ত থাকতেন। ইংরাজি শব্দের ভাণ্ডয়েল পালটে যে বিভিন্ন রূপের শব্দ তৈরী হয় সেই নিয়ে তার গবেষণা অনেক গভীরে গিয়েও সম্পূর্ণ হতে পারে নি শেষ পর্যন্ত শারীরিক কারণে।

ব্রাহ্মধর্ম – বাবা ছিলেন মনেপ্রাণে সক্রিয় ব্রাহ্ম। নিজের বাগানে রামমোহনের শ্বেতপাথরের মূর্তি স্থাপন করে লিখেছিলেন রামমোহনের তিন বাণী। তিনি ছিলেন All India Brahmo Conference-এর Managing Committee-র সদস্য। ব্যাঙ্গালোরের ব্রাহ্ম সমাজের President রামমোহনের মূর্তি স্থাপনের ইচ্ছা প্রকাশ করতেই বাবা তার সমস্ত ব্যবস্থা ছুটোছুটি করে সম্পন্ন করেন।

শেষ জীবন – জীবনের শেষ চার-পাঁচ বছর তিনি শয্যাশায়ী ছিলেন দুর্বল কোমরের জন্য। জীবনের শেষ দুদিন সামান্য জ্বরে ভুগে নিজের গৃহে ১৭ই অগস্ট সালে ভোর রাতে তিনি শেষ নিঃশ্বাস ত্যাগ করেন। হে পরমেশ্বর পিতা, আজ তোমাকে বারংবার ধন্যবাদ জানাই এই বলে যে আমার পিতাকে তুমি পরম শান্তির আশ্রয় দিয়েছো, তাঁর আদর্শ ও ভালোবাসা দিয়ে আমাকে ও বহু মানুষকে অনুপ্রাণিত করেছো। হে ঈশ্বর, তুমি তোমার অমৃতস্পর্শে আমাদের সকল বেদনা দূর করে দাও।



MY EXPERIENCE IN PRAGUE

Chandrima Bhattacharya | 2017 IT

About CAMDA

Critical Analysis of Massive Data Analysis is an international data analysis competition held during ISMB/ECCB Conference. Acknowledged as the "Olympics of Genomic", CAMDA is a long standing conference since 2000 and it hosts open contest on NGS data. The 16th edition of the conference, organized by International Society for Computational Biology (ISCB) was held in Prague from 21 July to 25 July this year.

Our Selection in CAMDA

In our final semester, we had an elective subject called Bioinformatics taught by Dr. Malay Bhattacharyya. There used to be only 7 student in his class, the class usually took place in the I.T. Conference room and included more of fun and practical learning instead of mugging up. It was during this course that Sir introduced us to CAMDA.

This year there were three open challenges on subway microbiome, nuroblastoma data and Oxford wiggles nanopore data. Two teams trying to tackle two of the challenges were formed. Our team was formed with Pinaki Chakraborty, Rohit Pandey and myself and selected to work on the Microbiome data. Coming from IT background, the initial inspection of data just seemed a few TB

of uncompressed ATCG arranged in random order. With time, as we learned to tackle the data, we found how there were many interesting observations to be made.

Irrespective of CAMDA challenge being held since 2000, till date there had been no participation from any Indian Institution before. Hence, getting selected for the challenge meant that it was the first time a complete Indian team got selected for representing in CAMDA. It was a great feat to get selected in CAMDA 2017, and what made it even better was that we were the youngest team to be participating in the challenge. Rest all other teams consisted of PhD, Postdoc or even Professors competing for the CAMDA trophy.

ISMB/ECCB 2017: My experience in Prague

Being the only UG student, and that too working in a cross-disciplinary subject, winning this competition wasn't easy. The rest of the competitors included PhD, Postdoctoral students and even Professors from reputed colleges like the Ohio State University, University of Florida, University of Sheffield, ETH Zurich, University of Toronto, University of California, LA and many more. That didn't deter us to win the 3rd position in the challenge. After participating in CAMDA we have received the offer to extend our work and publish in Biology Direct (a reputed journal with impact factor more than 3). Also as part of the recognition, we got the opportunity to get a free subscription of F1000 and also publish another research work with them.

Our research work was well appreciated by Professors from Cornell University, University of Florida, etc. and recognized as an outstanding presentation.

Participating in ISMB/ECCB 2017 was an eye opener for me. Interacting with Professors, research scholars from around the world, it was an eye opener for me about how computer science, AI could be used for biological detection. Since childhood, I had immense interest in Biology, and this conference provided me an opportunity to explore a completely new field, and learn on that subject in an interactive way.

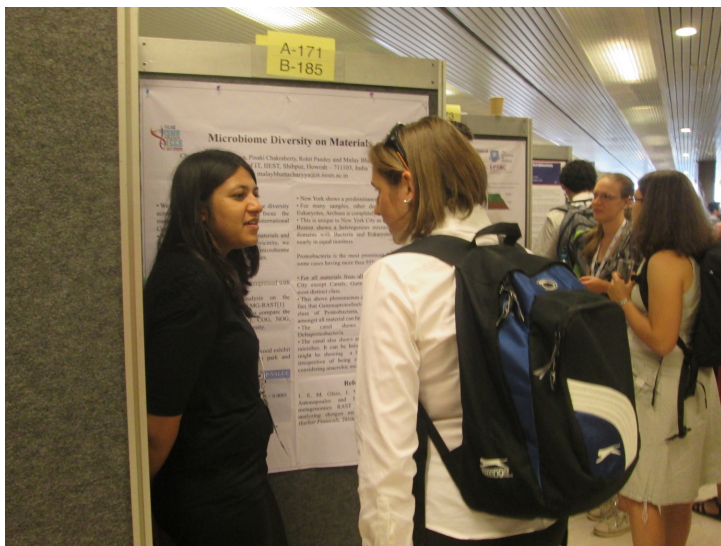
Special Note:

I would like to thank Dr. Malay Bhattacharyya and Dr. Arindam Biswas for supporting me for attending the conference. I would

also take this opportunity to thank Pinaki Chakraborty and Rohit Pandey for helping me with data analysis. A special thanks to GAABESU for providing me with travel grant and to CAMDA organisers for waiving my registration fee.

Note from the Editor:

Chandrima won the Outstanding Presentation Award (came 3rd) in the event.



IEST SHIBPUR STUDENTS SHINE IN INTERNATIONAL HARDWARE DESIGN CONTEST

“Smart Baby Monitoring System” designed by “Bayas-de-IEST”, a team with 5 members from the department of Information Technology of IEST, Shibpur, has secured 4th position among 30+ teams selected to participate around the world in International Hardware Design Contest (HDC) organized by IEEE/ACM 54th Design Automation Conference (DAC), one of the most premier and prestigious international conferences on design automation in the world and held at Austin, Texas, USA during June 18-22, 2017. The contest was open to both academia and industry worldwide and the theme of the design call was “FPGA for Internet of Things (IoT)”.

The Team



[From left] Subha Koley, PhD Scholar, Dept. of IT, Dr. Prasun Ghosal (Mentor), Assistant Professor, Dept. of IT, Simran Kaur, UG Student, Dept of IT, Abhishek Tiwari, UG Student, Dept of IT, Neel Kamal, PG Student, Dept of IT.

This whole design contest had started in November 2016, 8 months before the main event. A team was formed with the following members and named as “Bayas-de-IEST”.

Initially the design idea had been selected in top 31 after preliminary round of selection among all the ideas submitted from all over the globe during December 2016. The entire team had started working relentlessly to complete the design in time. After a long hard effort the design was completed in time and submitted by the deadline (May 15, 2017). After rounds of eliminations, finally 5 top designs had been selected and the five teams had been invited for live demonstration in DAC-2017 conference held at Austin, TX, USA during June 18-22. Two of the team members of Bayas-de-IEST had attended the conference and gave a live demonstration in front of all DAC attendees. It got a huge applause and positive response from both industry and academic delegates and secured 4th position in the contest.

Brief Description of the Design

Number of working parents in 21st century is increasing exponentially causing increasing loneliness and unintended negligence from the helpless parents towards their children. This work is a timely response to mitigate this issue. We have tried to utilize the power of *Internet of Things* to solve this problem. Our system aims to minimize this trouble with smart and interactive communication from both sides. Smart baby monitor can continuously monitor the baby at home. Whenever any unwanted situation occurs it can detect and informs the parents immediately. The smart and intelligent system, equipped with temperature sensor, gas sensor, camera, etc. will be always there to take care of the baby. The smart system has the ability to detect any unexpected change of temperature, smoke or dangerous gas inside the room and has the ability to notify the parents by sending

automatic SMS to their mobile phones. The system at the room is equipped with a monitor and camera having the ability to establish two way video communications that makes the system unique in its nature. With the help of this useful features not only the parents can see their babies but the babies can see the parents in the screen and communicate with them too. Also most of the parents need to hire nurse/nanny to take care of their babies. But they always have that anxiety if the baby is feed timely or not, or he/she is okay or not. For that reason they can any time turn the camera(s) on and see their child in real-time simply using the app.

Features of the System

1. Two way video calling facility that helps the parents and babies to see and interact whenever they want.
2. Different sensors are there to monitor the room condition continuously and have the ability to take necessary action.
3. Emergency SMS service to respective authorities is built in to protect the babies.
4. Simple and user friendly mobile application to make the system easily accessible.
5. Remote monitoring and surveillance of the condition of baby's room and take appropriate action

Prototype



Conference Venue



GLOBAL WARMING: POTENTIAL PROBLEMS AND POSSIBLE SOLUTIONS

Prof Bimal Bose | 1956 EE

Global warming due to man-made greenhouse gases appears to be a serious potential problem in our society. In 2007, Nobel Peace Prize was awarded to United Nations-IPCC (Inter-Governmental Panel of Climate Change) along with the U.S. Ex-Vice-President Al. Gore for their contributions in global warming. The root of this problem is the growth of astronomical energy consumption in the world. Energy has been the life-blood of our civilization, and per capita energy consumption has been the barometer of a nation's prosperity . In the olden days of pre-industrial revolution era, as indicated in Fig.1, mankind was mainly dependent on animal and manual labor. In this muscle age, our life style was very simple and unsophisticated, and the environment was clean. In 1785, James Watt of Scotland invented steam engine that ushered in the industrial revolution, and we were brought in the mechanical age, or age of machines. The industrial revolution gained momentum by the invention of internal combustion engine in the late nineteenth century. The wave of industrial revolution gradually spread from Europe to USA, and then to the rest of the world. The electrical revolution, or age of electricity started by the commercial availability of electricity in mid- 1880's, when at the same time, commercial induction motor was invented (1888) by Nickola Tesla. The commercial dc motor was introduced at an earlier date (1873), and then the synchronous motor arrived at slightly later date (1891). The electronics revolution, or the age of modern solid state

electronics was ushered by the invention of transistor in 1948 by Bardeen, Brattain and Shockley of U.S. Bell Telephone Lab. The same Bell Lab. also invented thyristor in 1956 that brought us in the age of solid state power electronics. Afterwards, gradually, came the eras of integrated circuits, computers, communication, and robotics. We now live in Internet age that brought revolution in communication. The whole world shrank into a global village. Human society is now more interdependent than ever. During these mechanical, electrical and electronics ages, the energy consumption in the world has been growing by leaps and bounds to cater the need of growing world population and improvement of living standard. So far, we hardly paid any attention to the adverse effect of energy consumption, i.e., environmental pollution problem.

EVOLUTION OF INDUSTRIAL CIVILIZATION

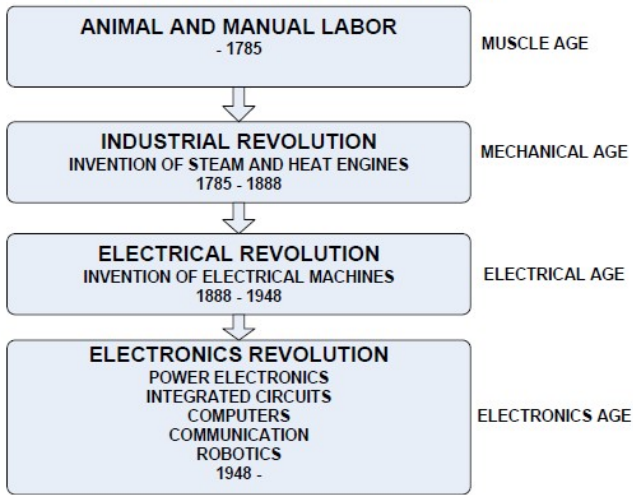


Fig.1. Evolution of industrial civilization

Global Energy Scenario

Global energy generation scenario, 21% comes from natural gas, and the remaining 33% comes from oil. About 6% of our total energy is generated in nuclear plants, and the remaining 13% comes from renewable resources. Fig. 2 shows electricity generation by different fuel types for a few selected countries (USA, Japan, China and India).

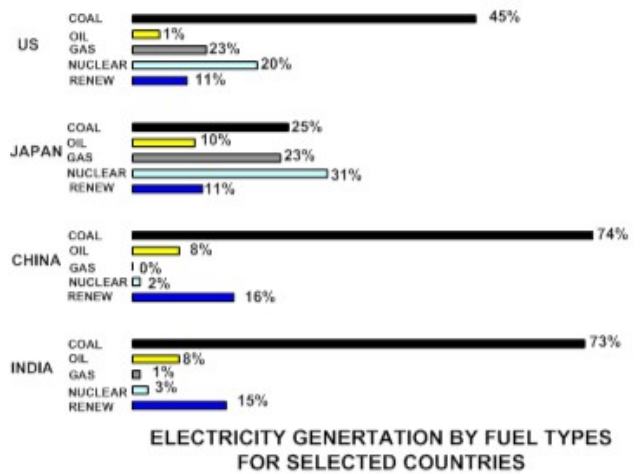


Fig.2. Electricity generation by fuel types for selected countries

Environmental Pollution – Global Warming Problem

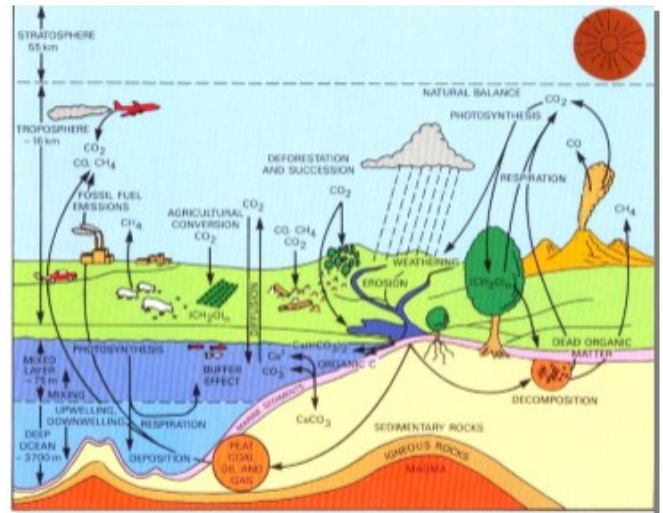


Fig.3. How greenhouse gases are generated

Global Warming Effects

The long term effect of global warming is serious. Gradual melting of world's glaciers, Severe droughts in tropical countries near the equator, such as Africa and India. Circulation of more air with heavy moisture will cause more hurricanes, tornados, heavy rains and floods. Tropical climate with more moisture will induce spread of diseases. Gulf stream warm water in the "ocean water conveyer belt".

Carbon Emission Curves

Scientists have studied carbon (or CO₂) concentration variation in atmosphere over a long period of time by ice core studies.

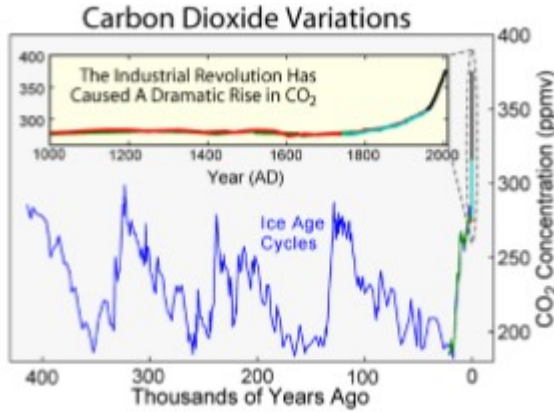


Fig.4. CO₂ variations in atmosphere –thousands of years ago

The cause for cyclic variation of CO₂ (ice age cycles) in the atmosphere is not exactly known. Fig. 5 shows the global carbon emission curves in the last 200 years (post industrial revolution era) due to burning of different fossil

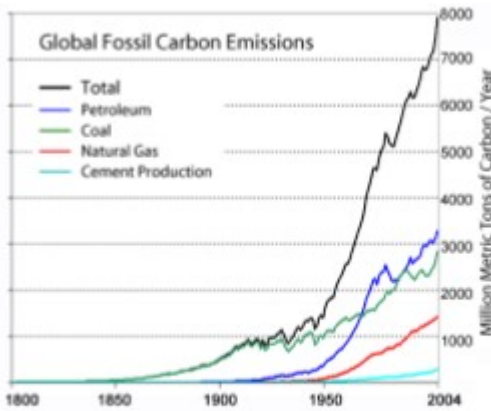


Fig. 5. Global fossil fuel CO₂ emissions

It has been estimated that 80% of atmospheric CO₂ (i.e., 8000 million metric tons of carbon/year) is generated by man-made fossil fuel burning, of which typically 50% is due to electric power generation, and 40% is due to oil-based transportation. Fig. 6 shows per capita CO₂ emission versus population of some selected countries. The horizontal axis shows the population (in millions)

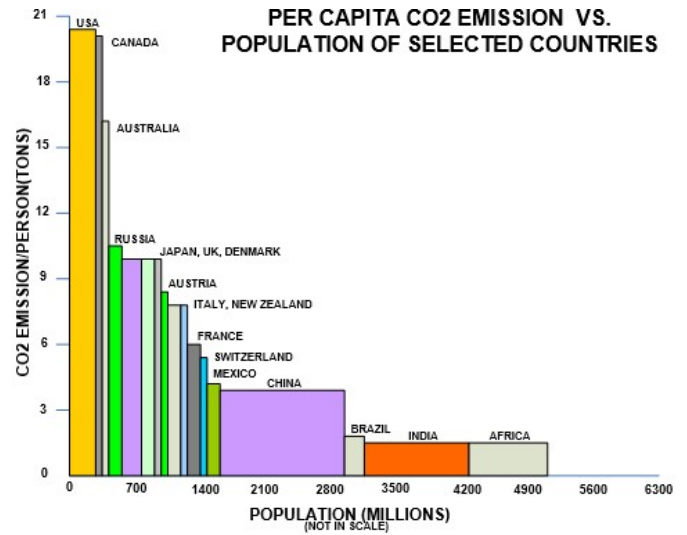


Fig.6. Per capita CO₂ emission vs. population of some selected countries(2004)

With the present rate of growth of world energy consumption (if no remedial actions are taken), the potential CO₂ rise during 2002 to 2030 is huge. In 2002, the total energy consumption in the world was typically 410 quadrillion BTU (1 quadrillion = 10²⁴ Units),. The corresponding generation of CO₂ was typically 7.0 billion tons/year. The world energy consumption is expected to grow typically 60% during the 28 years, and the corresponding CO₂ will rise by 62% (11.3 billion tons/year) due to some increased share of the fossil fuels. Evidently, as a result, the global warming effect will be significant.

Temperature and Sea Level Rise

The United Nations IPCC estimates that atmospheric temperature will rise typically between 1.1 oC to 6.4 oC in the next 100 years due to greenhouses gases, if no remedial actions are taken. Various climate research organizations in the world (summarized in Fig.7) have attempted to generate climate models of the world and make extensive simulation studies in supercomputers, and have come up with global warming projections, as shown in Fig.7. The initial part of the curves for past 100 years (1900-2000) shows that the temperature, in fact, rose between 0.6 oC and 1.0 oC. The worst case temperature rise projection for the next 100 years is 50 C, whereas the most optimistic projection is 20 C. Similar studies have been made by U.S. National Academy of Sciences. The large error in the projection is due to inaccuracy of climate model which is extremely complex, and will possibly take long time to correct. Note that none of the studies disagree that there will not be any global warming.

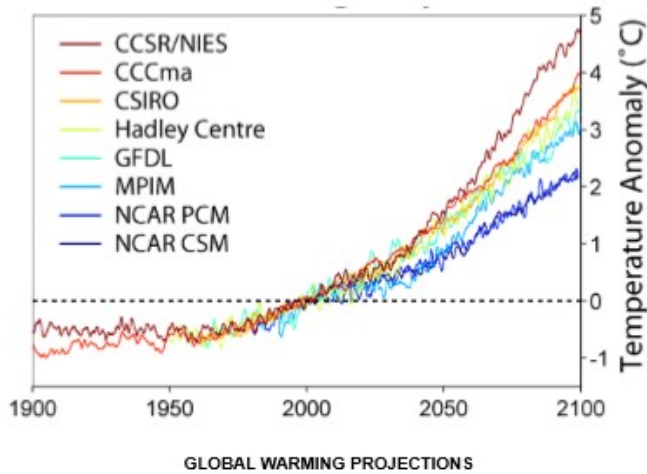


Fig. 7. Global warming projections by different research agencies

Among all the grim effects of global warming, there are however a few beneficial sides. As mentioned before, CO₂ absorption by photosynthesis helps nutrition of agriculture and plants (carbon fertilization effect) that will promote growth of agriculture, but will be offset by droughts. Melting of polar ice caps opens new and shorter navigation routes (in Summer only). For example, shrinking of arctic ice from 1.5 million square miles to 1.0 million miles in 2006 alone, has opened new shipping route in Arctic ocean that has reduced navigation distance between London and Tokyo by 48% (13,000 miles to 8,100 miles). It is estimated that around 25% of world's oil and gas reserves are below the Arctic ocean, which will be available soon for exploration. However, this exploration will be expensive. Besides, melting of ice will recover new lands that will be available for habitation and agriculture. Canada, Russia and Greenland are beaming with joy with these new expectations. In addition, warming of weather in cold climates will reduce the heating bills.

Kyoto Treaty and Carbon Emission Control

Considering the serious consequences, the United Nations called a series of international meetings to discuss the challenges posed by global temperature and climate change.

How to Solve or Mitigate Global Warming Problem?

The question is how can we solve or mitigate the global warming problem? The first step we can take is to promote all of our energy consumption in electrical form. Instead of distributed consumption of fossil fuels, centralized fossil fuel based power generating stations can use advanced emission

control standards. As emission control technologies advance, it is somewhat easy to apply such technologies in central power stations. As mentioned before, coal is the most abundant fossil fuel on earth, but it is also the dirtiest fuel for environmental pollution. Some are demanding to stop coal based power generation altogether, but practically that may not happen easily because of our abundant resources of coal. Coal power stations, at present, have very poor efficiency (typically 35%) which can be improved significantly to reduce pollution. Currently, there is ongoing research on clean coal technologies, which can be classified as CCS (Carbon Capture and Sequestration) and IGCC (Integrated Gasification Combined Cycle). In the CCS technology, CO₂ is captured from the power station chimney, compressed, transported, and then stored underground. In the IGCC process, coal is pulverized, gasified with the help of steam, and then impurities are separated. None of these technologies have been successful commercially. Nuclear power is claimed "environmentally clean", and currently, there is demand for increasing nuclear power generation. However, the nuclear accident in Fukushima Daichi plant of Japan has caused a setback in that direction.

Since trees absorb CO₂, the tropical rain forests (such as Amazon rain forest) can be preserved, or widespread forestation can be promoted to mitigate the global warming problem. Some countries are actively promoting tree plantation as new housing estates are being developed. Controlling human and animal population to reduce GHG is not easy. Since human beings exhale CO₂ as well as demand energy for living standard, population control gives benefit in two dimensions. A substantial portion of global energy demand can be met by promoting environmentally clean renewable energy sources (hydro, wind, solar, geo-thermal, and fuel cells), and the current trend in the world is to explore them vigorously. Fuel cells can be defined as clean if clean energy is used to produce hydrogen fuel. Recent studies has indicated that hydro, wind and solar technologies (with adequate storage) can provide 100% of world energy eliminating all fossil fuels. The ICE vehicles can be replaced by electric vehicles (with the interim phase of hybrid vehicles possibly with bio-fuels), and if electricity is generated by clean sources, GHG pollution by transportation will be mitigated substantially. The study also indicates that mass-produced EVs (with Li-Ion or Ni-MH batteries) the life-cycle cost (with battery replacement cost) is comparable with ICEV if gasoline price is more than a threshold value. Promoting mass transportation, particularly by railways, as in Japan and Europe, will mitigate global warming problem. Again, considerable amount of energy can be saved by improving efficiency in generation, transmission, distribution and utilization of electrical energy.

Unfortunately, a considerable amount of energy is simply wasted in the world because of bad consumer habits or affluence of people. For example, it has been estimated that 33% of total energy in USA is simply wasted. Saving the wasted energy (i.e. promoting conservation) in different countries can play significant role in curbing global warming problem.

Conclusion

The energy consumption in the world is increasing dramatically due to our quest for higher living standard and rising world population. Most of our energy comes from fossil fuels, and burning these fuels causes environmental, and particularly, the global warming problem. Global warming raises the sea level, brings drought in tropical regions near the equator, increases hurricanes, tornadoes and floods, and spreads diseases. The consequences are serious, and will tend to bring tremendous unrest in the world. Various measures to solve or mitigate the global warming problem have been outlined in the paper

Source: <http://usbengalforum.com/becaa-eastcoast-2017-reunion-article-from-dr-b-k-bose/>



ART WORK

Partha Ghosh | 1967 CE

(Compiled by Dipanwita Ghosh, his daughter)



Where religion divides, art can unite. We just need to allow it. Dad's latest in charcoal on paper



“If only we knew how to speak to animals, we wouldn’t need therapists. They love, they listen, they support and they don’t charge you by the hour.” – a friend. Dad’s latest in soft pastel on paper



Some twenty years ago, while looking at an Autumn sky: Me: Those clouds look like candy floss. Granny: No, they are all the old ladies in heaven drying out their hair after a trip to the salon! Me: Why does Goddess Durga have ten hands? Granny: Because she is a woman. Women are powerful and they can multi-task. Me: I want to be a Goddess when I grow up. Granny: You are already a Goddess. Every woman around you is a type of

Goddess...loving, capable, hard-working, caring and talented. Always remember that. Here's wishing my wise granny an amazing hair day at the heavenly salons.



There is a chaos about this place. The loud ringing of copper bells, brightly coloured flowers strewn all around, the sonorous blows of conch resonating through the giant pillars, beggars bargaining professionally with visitors, children running around in free abandon, the chants and prayers echoing through the overhead microphone and the many believers looking to take a quick dip and purge sins in the Ganges river that babbles by. But despite the chaos, there is a sense of hope and peace. A peace that comes from seeing the millions that come here day after day with fervent prayer on their lips and desperate faith in their hearts. Dad captures this beautiful chaos through his latest work in ink pen. (The Dakshineswar Temple circa 1924)

Source: <http://usbengalforum.com/partha-art-work/>



GAABESU ELECTION

Election for Members of the Executive Committee of GAABESU for the period 2017-2019 was conducted as per relevant Sub-Clauses under Clause 5.0 of the Regulations of the Association by the three-member Election Commission comprising 1) Shri

Amitabha Ghoshal (Civil 1957), Chairman, 2) Shri Syama Prasad Datta (Civil 1967), Member and 3) Prof Netai Chandra Dey (Mining 1986), Member.

Election was conducted with utmost care and secrecy and following 27 (twenty seven) members stand elected.

Sl. No.	Name
1	Arun K Deb Civil, 1957
2	Achyut Ghosh Mechanical, 1961
3	Prabir K Neogi Civil, 1962
4	Dibakar Ghosh Civil, 1968
5	Nihar Biswas Civil, 1970
6	Tapas K Som Mechanical, 1971
7	Dipta Sundar Mallick, Mechanical 1974
8	Arabinda Roy, Electronics and Telecommunication 1976
9	Anjana Ganguly Roy, Electronics and Telecommunication 1977
10	Tanmoy Das, Mechanical 1979
11	Sitansu S Ghosh, Mechanical 1980
12	Saumitra Sinha, Metallurgy 1981
13	Indranath Sinha, Mining 1982
14	Prasanta Kumar Ghosh, Civil 1983
15	Banibrata Mandal, Civil 1984
16	Prasid Syam, Electrical 1984
17	Somnath Sinha Ray, Architecture 1987
18	Dhiman Saha, Civil 1988
19	Sushanta Sinha, Electronics and Telecommunication 1988
20	Pradip Kumar Bandyopadhyay, Mechanical 1988
21	Amitava Roy, Architecture 1990
22	Pratik Dutta, Mining 1990
23	Sandip K Sadhukhan, Mining 1992
24	Amitabha Das, Electrical 1997
25	Chandrajit Banerjee, Mechanical 1998
26	Sandeep Chatterjee, Mechanical 1998
27	Shreayan Nandy, Metallurgy 2012



EMERGENCY FUND APPEAL

GAABESU Emergency Fund Raising Committee has decided to initiate a global fund raising drive to support **Mr. Amit Roy (1974/ARCH)**.

We received an appeal from his son Mr. Krishnendu Roy which is appended below:

Sir,

I am Krishnendu Ray, son of Mr. Amit Ray who is an alumnus of this institute. He was of 1974 batch, from the dept. of Architecture.

Presently he is suffering from acute pneumonia, and is in ventilation in Narayana Health (Old West Bank Hospital).

Sir, I am the only son of my father, and work in a private farm. Presently I am not having any Mediclaim support. Since I am the only earning member in the family, it has become extremely difficult for me to support the expenses of father's treatment. In this scenario, I seek your kind help and support so that we can continue the treatment.

With best regards,
Krishnendu Ray

Please send a note to GAABESU Office (gaabesu@gmail.com) with your transaction information, purpose of the transaction. Please include your full name, year and department for all communications to us.

GAABESU Emergency Fund Raising Committee has decided to initiate a global fund raising drive to support **Mr. Dipak Ranjan Mandal, 1992/EE**.

We received a Fund raising appeal from Mr. Ujjwal Kumar Mondal & Other friends of 1992 which is appended below:

Dear Sirs,

Our friend Dipak Ranjan Mandal, 1992 Batch EE from erstwhile B. E. College needs a kidney to be transplanted within 3 months.

He was diagnosed with renal failure in 1997, both kidney failure by 2000. One kidney transplanted in 2000. Now it is not working well. So the other needs to be transplanted as soon as possible. Approximate cost of this transplant, including the cost of kidney and post-operative treatment is approximately 17 lakhs INR.

Since he is jobless already, we request a financial support from / through GAABESU. Also in 2000, GAABESU helped Dipak to a considerable extent, many thanks for the same.

We hope to get a positive response from GAABESU.

With thanks and best regards,
Ujjwal Kumar Mondal & Other friends of 1992 batch

On behalf of
Dipak Ranjan Mandal

Please send a note to GAABESU Office (gaabesu@gmail.com) with your transaction information, purpose of the transaction. Please include your full name, year and department for all communications to us.

Appeal for **Sandip Ray, 97 Civil**

Target Fund: At least 12 Lakhs

A REQUEST: Please don't call Sandip right away. Contact me or Amar Hazra. Hope you understand that he must be morally up.

Friends you might be aware that our classmate Sandip Ray is fighting with Blood Cancer for last 14 months. Initially it was anticipated that expenses can be taken care from Insurance. But due to some recent complication he is on the verge of financial collapse after spending huge 70 lakhs!!!

I am sure those who knew Sandip, he was a brilliant scholar as well as a good sportsman in our college days and a jovial border of Hostel 16, Hostel 10 and Sengupta Hall.

Find below the account details:

Name: Sandip Ray

Account No: 07181610063628

Bank: HDFC Bank, DN - 1, Eternity Building, Sector V, Salt Lake City, Kolkata 700 091

RTGS/NEFT IFSC: HDFC0000718

NOTE: Please don't forget to write your name and details in the comments like "Partha P Roy 97CE" or at least "IEST" or "B. E. College" to track the payments for records

For donations in USD please see the details of the coordinator in USA:

Mr. Kaushik Sen (kaushiksen76@gmail.com)
Mail your check to Kaushik at 11502 Barrington Way, Austin, TX - 78759

Dear All,

GAABESU Emergency Fund Raising Committee has decided to initiate a global fund raising drive to support **Mr. Ujjal Adhikary (1998/ETC)**.

He has been suffering from Hypoxie Ischemic Encephalopathy Wesepsis from 24/07/2017. He had been admitted to Apollo Gleneagles Hospital, Kolkata from 25/07/2017 to 04/08/2017. After that we admitted him to Kothari Medical Centre, Kolkata due to reduced treatment cost. Now he is in ICCU at Kothari, BED NO. 4019.

We received an email from his batch mate which is appended below:

Dear All,

With due respect I beg to state that my friend Sri Ujjal Adhikary, who passed B.E. from B.E. College (D.U.), Shibpur in Electronics & Tele Communication Engineering discipline in the year of 1998 has been suffering from Hypoxie Ischemic Encephalopathy Wesepsis from 24/07/2017.

One group of ETC 98 Batch donated Rs. 1 lakh for his treatment.

Regards,
Sandip Gharami,
B.E., B.E. College(D.U.),
ETC , 1998.

Please get in touch with the following person for the update:
Sandip Gharami, (1998,ETC)

Email: hmgandip@gmail.com

We request you to extend your kind support as much as possible to continue his treatment. We wish his speedy recovery. Looking forward to your kind support.

Please send a note to GAABESU Office (gaabesu@gmail.com) with your transaction information, purpose of the transaction. Please include your full name, year and department for all communications to us.



GUIDELINES FOR PUBLISHING ARTICLES IN ALUMNI LINK

The following guidelines are followed in accepting any write-ups for publication:

1. Please send your comments and relevant information/materials for publication to alumnilink3@gmail.com and write "Alumni Link" in the subject line
2. Comments, observations, and suggestions about any alumni activities and IEST, Shibpur are welcome.
3. Contribution in the form of stories, poems, sketches, cartoons, travelogues, essays, etc. are highly appreciated.
4. Contents are accepted in English or Bengali.
5. All write-ups (both Bengali and English) should be in MS-Word format (no PDF)
 - a. Font and size: Adorsholipi (9pt) for Bengali and Verdana (9pt) for English
 - b. Bengali typing software: Avro Keyboard (in MS Word)
 - c. Poems/ songs/quotations Font (that are part of the articles, not stand-alone content): Adorsholipi in italics (9pt)
 - d. Alignment: Justify or aligned with left margin
6. NOTE for Bengali Font:
 - a. Set the typing parameters before editing/typing. Avro may be associated with some bugs while transforming fonts and it may fail to change the fonts later; please use this caution to avoid retyping.
 - b. Set font to Adorsholipi and size 9 point before typing starts. Avro uses Vrinda by default.

c. Please refrain from using English words as much as possible in a Bengali write-up and too many such use i.e. inability to translate English to Bengali may lead to rejection of the content.

d. When it is absolutely required to put English fonts in Bengali write-up, please use Verdana gpt font.

e. Do not use multiple spaces/tabs between words; use default paragraph margins for typing and two spaces at the start of each new sentence. Please do not change the line indents.

f. Save files in .doc (or .docx format. MS Word sometimes fails to retain formatting after closure of document and you are responsible to choose appropriate version (2003) etc.) as long as your formatting is not disrupted when you convert the document to a PDF.

7. Personal and professional accomplishments that you want to share with your fellow alums are encouraged. Please refrain from using this forum to promote personal propaganda or business.

8. Local news, Batch news, event announcements and event/chapter reports are most welcome.

9. If you are looking for help to promote institutional or Alumni interest you may reach out via this forum

10. We solicit any entry that is appropriate for the IEST (student, faculty and alumni) community.

11. We will publish the write-ups as long as the message does not attack anyone personally and/or contain any apparent political agenda

12. Electronic newsletters are published quarterly. The Alumni Day Edition will have the print version.

13. Please come up with your original article that is not published or available with the same content in the web or print version; Alumni Link is an exchange forum for Alumni and not a "College news".

14. You may submit your articles anytime during the year and if it is associated with any seasonal notion, mention that in the subject when you want to see it published.

15. There will be an 'Opinion' Section where alumni can voice their views for the betterment of the institute and her communities. Alumni are requested to maintain proper decorum and professionalism and not use this as a forum to promote any personal agenda. The Alumni Link Editorial Team reserves the right to exclude/modify the content. Editorial Team would seek permission from the writer if he/she agrees with the changes and the writer would have the option to withdraw the write-up if he/she does not like the changes. There will be a provision to

include the e-mail address and/or phone number which is optional. Ideally any Alumni (GAABESU Member/Non-Member), Faculty, Staff or Student can submit his/her opinion. However we do not encourage any Alumni Link Editorial Team Member (and EC Members too) to write in the opinion section as there may be a conflict of interest. Neither GAABESU Executive Committee nor Alumni Link Editorial team is responsible for the opinions expressed in this section.

16. Editorial team reserves the ultimate right to edit/accept/reject any entry.



OBITUARIES

Santanu Sen, 1981 EE

Santanu Sen , 1981 EE breathed his last on 12th June 2017 at Bhopal. He is survived by wife, Gayatri & and daughter, Trina.

Santanu was born in Kolkata and did his ICSE from Don Bosco.

After graduation, he joined in BHEL Bhopal. He was extremely friendly with unmatched sense of humour

Ranjit Ganguly | 1981 EE

Amiya Kumar Dasgupta, 1945 CE

Amiya Kumar Dasgupta, BE (Civil) 1945, Former Engineer-in-Chief and Ex-Officio Secretary, PWD, Government of West Bengal and Former Chairman Public Service Commission, West Bengal, breathed his last at around 2.00PM on 06th August 2017).

He worked in different places in PWD before joining PSC as Chairman. He worked for sometime in Tripura PWD on deputation and also served West Bengal Housing Board as Director in the initial stage of its formation. At his initiative State Highways in West Bengal were numbered for the first time.

He was an active member of BE College Ex-Students' Club and was a member of Advisory Council of the Club for quite a long time.

He has left behind his daughters, sons-in-law and many friends and relatives.

I pray for his soul to rest in peace.

Syama Prasad Dutta | 1967 CE

Prof D. N. Roy, 1953 ME

With tearing eyes and heavy hearts, we pay our last homage to Dr. Dhruva Nath Roy, Ex Professor of Mechanical Engineering Department of the erstwhile Bengal Engineering College, Shibpur. Dr. Roy Graduated in Mechanical Engineering from B. E. College, Shibpur affiliated to Calcutta University with flying colours having topped the list of students and was placed in first class in Mechanical Engineering. After graduation, he worked briefly in Guest Keen & Williams Ltd, and Telco before joining M.S.E. at Johns Hopkins University, USA with scholarship. After completing his studies in the U.S.A., he came back to India and joined the Applied Mechanics Department, B. E. College as a faculty member. During his tenure in the department of Applied Mechanics he started doing research on Heat Transfer and obtained a Ph.D. degree from Calcutta University under the guidance of Dr. P. N. Chatterjee. Later in 1975, he joined the Mechanical Engineering Department as an Assistant Professor and very soon was elevated to the post of Junior Professor and subsequently became the Professor of Mechanical Engineering. He served as a Head of the Mechanical Engineering Department from 1979 to 1983. After retirement in 1991, he was appointed as a Principal of the Kalyani Government Engineering College and served there for nearly two years.

Dr. Roy had profound knowledge in Fluid Mechanics and Heat Transfer. His main research area was entrance length problems in circular pipes. He published quite a good number of papers in the reputed refereed journals. Academic Press published a few volumes of compiled papers on fluid mechanics under the title Advances in Fluid Mechanics and Dr. Roy's work were incorporated in the first volume itself recognizing his expertise in the subject. His love for the alma mater restrained him from leaving B. E. College, Shibpur till his retirement. Dr. Roy wrote a book Applied Fluid Mechanics published by East West Press which was recommended as a textbook for undergraduate studies in any International University.

Dr. Roy was very simple in nature, possessed a wide heart of a true teacher and was very cordial to his colleagues. He has guided many students and scholars in their research work. He also received the Best Teacher Award from B.E. College, Shibpur. Dr. Roy had many hobbies notably gardening, photography, collecting the rare books, and finding the appropriate Bengali words for different technical terms. He founded an association of Ex-Faculty of B. E. College, Shibpur named 'B. E. College Ex-Faculty Forum' which still

exists and works. The motto of the forum is to solve the glaring problems of remote areas of West Bengal by providing technical solution which is feasible and cheaper.

Dr. Roy was suffering from old age disease and breathed his last at his residence in Kalyani. His sad demise is a great loss to the academic world and community around him. May his great soul rest in peace in heaven.

Prof Asim Kumar Bose, B. E. College Ex-Faculty Forum, Shibpur



(Prof D.N.Roy, 1953 ME)

Dhruva Da's sudden demise comes as the most shocking news to me.

I express my condolence to Mrs. Roy, his son Litu and his daughter Rinku.

During my 11 years in BEC, Dhruva da was my closest friend, although I graduated in EE in 1956 and he graduated in ME in 1953. He used to call me Bose, not Bimal, although I was junior to him by 3 years.

He used to discuss research topics always with me whenever I met him, whereas most other faculty members loved discussion in politics. He was very scholarly and a perfect gentleman, a very tall imposing figure.

Familywise, we were closest in BEC campus. I wish I could send a message to Mrs. Roy. Mrs. Bose is also very shocked with the news.

We often forget that a day will come when all of us will have to say good bye.

"Morita chahina ami sunder bhubane" sang the poet Tagore. But alas! Everything "Dinante nishante sudhu patha prante phele jete hoi".

Prof Bimal Bose | 1956 EE

Sanjay Bagchi, 1988 ME



We are saddened to inform you that our beloved Sanjay Bagchi (Mota), 1988/Mechanical is no more. He passed away in a hospital in Kolkata on Wednesday (September 27th) early morning. Perhaps many of you are aware that he had a cerebral attack & was admitted to a Hospital in Kolkata where he was under treatment for close to a month but could not survive finally. May his soul rest in peace.

He was one of the brightest student all through his career & stood fourth in the batch. Sanjoy was a humble guy with lovable character. He was staying in Hostel 7 & afterwards in Richardson in 3rd & 4th year. He was actively involved in the Cultural Program part of 53rd Reunion Celebrations.

Sanjay was employed in HPCL throughout and was transferred to Bude Budge, Kolkata recently from Haldia. He was a Senior fellow in HPCL. His life will continue to be an inspiration for many of us.

He is survived by his mother, wife Rina, daughter Sanjana and son Shrinjan in Dakshineswar, Alambazar, Kolkata and has an Elder Brother Subrata.

P.K. Bandyopadhyay | 1988 ME

Atalanta Chakraborty | 1988 ME

On behalf of everyone at GAABESU, we offer our sincere condolences to their families and friends. We pray for the eternal peace of the departed souls.



COLLABORATION BETWEEN UWINDSOR AND IEST, SHIBPUR

Nihar Biswas | 1970 CE

Dr. K. Lakshmi Varaha Iyer has been awarded the Gold medal by the Governor General of Canada for his achievements in academics at the University of Windsor. The Governor General's Medal,

established in 1873, is one of the most prestigious awards that can be received by a student in a Canadian educational institution for exceptional academic achievement.

Dr. Iyer was supervised by Dr. Narayan Kar, Professor, Electrical and Computer Engineering, University of Windsor and co-supervised by Dr. Kaushik Mukherjee, Assistant Professor, Electrical Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur (Formerly Bengal Engineering and Science University, Shibpur).

Under the ongoing collaboration between University of Windsor and Indian Institute of Engineering Science and Technology (IEST), Shibpur (Formerly Bengal Engineering and Science University, Shibpur), Dr. Iyer has been associated with Dr. Kaushik Mukherjee since July of 2011 when Dr. Mukherjee was a Visiting Professor at the CHARGE labs, University of Windsor. Since then, under their supervision, Dr. Iyer has been addressing scientific challenges and innovating in the areas of electrified transportation and sustainable energy systems. He also conducted a part of his doctoral research work at IEST in the year 2014-2015 through the NSERC Michael Smith Foreign Study Program. In addition, he was awarded several other scholarships from professional organizations throughout his graduate student career. Dr. Iyer is the author/co-author of nineteen peer-reviewed journal publications in international journals, as well as over twenty-three peer-reviewed conference papers presented at international scientific conferences. According to the department's nomination, "His publication record can be ranked among the top 1% of all graduate students in the history of the Department of Electrical and Computing Engineering."

Quoting a news article published at the University of Windsor, Dr. Iyer says "This award is the result of continued guidance from Dr. Kar, Dr. Kaushik Mukherjee, and collaboration with other like-minded professors, fellow researchers, and technologists in the CHARGE labs, as well as sponsoring industries. This award is ours. I am immensely grateful to the Almighty for all the favours received and thank my parents for my upbringing, as well as family and well-wishers for their continued support in my quest for knowledge and excellence."

We are extremely proud of the contribution that Dr. Mukherjee has made in this entire process.

Dr. Iyer has joined Magna International recently and doing very well. Iyer completed his BE from Sastra University in India.

