

Resume of Dr. Rituraj Kalita
(Faculty Member at Cotton College, Guwahati. Resume Made in May 2011)

- Name: Rituraj Kalita
- Date of Birth: 01 September, 1968
- Present Address: Department of Chemistry, Cotton College, Guwahati-781007, Assam
E-Mail: rkalita@rediffmail.com Cell-Phone: 0-98640-15207
- Educational Qualifications: B.Sc. (Honours) in 1990, M.Sc. (Chemistry) in 1992, Ph.D. in 2010
H.S.L.C. (Class X) from SEBA, Assam in 1985 with 80.1% marks
H.S. Sc. (Class XII) from AHSEC, Assam in 1987 with 71.7% marks
B.Sc. (Honours in Chemistry) from I.I.T., Kharagpur (W.B.) in 1990 with CGPA (cumulative grade point average) of 7.99 in the scale of 10
M.Sc. in Chemistry (with specialisation in physical chemistry) from I.I.T., Kharagpur (W.B.) in 1992 with CGPA of 9.18 in the scale of 10 (Combined CGPA of 5-year Integrated M.Sc. course being 8.47)
Ph.D. in Chemistry from Gauhati University, Guwahati in May 2010
Ph.D. topic was: 'A Theoretical Investigation into the Origin of Anti-Tumour Activities of Several Derivatives of 2,5-Diphenyl Furan System, and Development of Some Requisite Modelling Software'
- Appointment: Joined as Lecturer in Chemistry at Cotton College, Guwahati, Assam in May, 1993. Working as Associate Professor there from May, 2008.
- Job Activities: Teaching chemistry at degree (major and subsidiary) and postgraduate levels along with higher secondary (+2) level for the last 18 years. Mostly teaching various topics of physical chemistry, quantum chemistry and computer applications in chemistry, along with preparation of study materials for theory as well as practical. Taking part in evaluation work for university, council and entrance examinations for the last 15 years. Other activities include chemistry apparatus and instrument maintenance, departmental computer maintenance and supervising PG students about computer work.
- Research Activities: Was engaged in theoretical (computational) chemistry research from 1999 to 2008 at Gauhati University, Guwahati under the guidance of Prof. Chitrani Medhi, working in the field of theoretical study of drug-DNA interactions. Has developed a set of theoretical chemistry software for modelling molecules and molecular interactions, and these software have been profusely used by many members of the said research group at Gauhati University. Published five papers as follows.

Research Publications:

1. Hazarika P., Sarma R.L., Karim M., Bezbaruah B., Kalita R., and Medhi C. *Indian Journal of Chemistry*, 2009, **48A**.
2. Sharma R.L., Kalita R., Karim M., Bezbaruah B., and Medhi C. *Indian Journal of Chemistry*, 2008, **47B**, 1605.
3. Parajuli R., Kalita R., and Medhi C. *Indian Journal of Chemistry*, 2006, **45B**, 782.
4. Talukdar D., Parajuli R., Kalita R., and Medhi C. *Indian Journal of Chemistry*, 2006, **45A**, 1804.
5. Kalita R. Computational chemistry via educational tools: modelling molecules and reactions. *Proceedings of the National Workshop on Computers in Chemistry*, June 2006 (Cotton College, Guwahati).

On-Web Booklets Prepared:

Has authored free on-web (i.e., Internet) study booklets in various topics of degree and postgraduate level chemistry e.g., in statistical thermodynamics, non-equilibrium thermodynamics, solids and ionic solids, basic quantum chemistry, advanced quantum chemistry, electrochemistry, programming in chemistry, computational chemistry, data analysis etc., developed and maintained in a website www.angelfire.com/pro/riturajkalita/chemnotes.htm. These have been used, referred to, and archived by various organisations around the world (and are easily available via web searches).

Software-Development Activities:

Has also developed several freely distributed scientific, linguistic and mathematical computer-software, namely mathematical Fortran programs and full software-packages such as Force-on-Nuclei (a theoretical chemistry software), Power-Surface (power-series curve-fitting software), Assam-Calcu (a programmable calculator), Shabda-Brahma (a multi-lingual auto-typing software), Granthaalok (a library-management package) and Abhibhavak Organiser (a daily-life organiser package). The said packages have been hosted free for the last several years (from 2006 onwards) by the most popular software-hosting organisations such as CNet Download.com and Softpedia, and have been downloaded and used by hundreds of users around the world.

Social Writings:

Has written extensively for promotion of social justice, peace, social harmony, secularism etc. in local print media as well as on the Internet. Has been associated as an honorary sub-editor with the publication of the socio-political Assamese bi-monthly periodical 'Natun Padatik' since 2005. Some important writings (available in a site www.angelfire.com/pro/riturajkalita/writings.htm) are as listed below:

1. *Discussing Food and Food-Values at the Backdrop of Poverty-Stricken Indian Society* (in Assamese, being published in series in 'Natun Padatik')
2. *Green House Effect, Attempts for its Correction and Us* (in Bengali, published in 'Sangbad Lahari' newspaper, Guwahati in 2010)
3. *Extortionism: A Socio-Economic Characteristic of Contemporary Assam* (in Assamese, published in 'Natun Padatik' in 2006)
4. Some Poems (English, at www.angelfire.com/pro/riturajkalita/writings.htm)
4. More Poems (Assamese, at www.angelfire.com/pro/riturajkalita/assa_p.htm)