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Professor. S. ARAVAMUDHAN: Resume (~50 words)

Sankarampadi Aravamudhan: M.Sc., Degree (1968) Physical Chemistry, S.V. University Tirupati. Obtained Ph.D. Degree (1975) (working on "EXPERIMENTAL STUDIES IN OVERHAUSER EFFECT") from the Chemistry Dept. IIT/Kanpur. Post doctoral research as Max Planck fellow at Dept. of molecular Physics, Max Planck Institute Heidelberg (1975-1977). And subsequently, at the Institute for Atom and solid State Physics, Free University Berlin (1977-1978). Scientist at NCL, Pune, (1979-80).

Since 1985, teaching at the Chemistry Dept. North Eastern Hill University, Shillong; attained the age of **superannuation on 30th Nov. 2006**; and, (thus retired from the University Job) is still active at the same department as Emeritus **Professor**; preoccupied with research in the specialized area of study owing to his Extensive experience in Instrumentation and the Theory of Magnetic resonance parameters; and has been interested in the Biological applications of NMR along with the specialization in Physical and chemical sciences.

Sankarampadi ARAVAMUDHAN
Dated: The Shillong , Saturday, April 19, 2014

http://aravamudhan-s.ucoz.com
http://saravamudhan.tripod.com/
http://nehuacin.tripod.com/

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23235733, 23232317, 23236735, 23239437

'UGC Website : www.ugc.ac.in

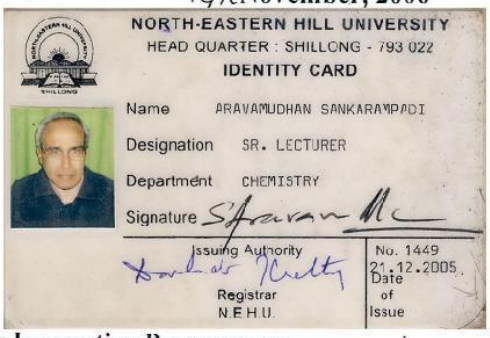
ज्ञान–विज्ञान विमुक्तये

विश्वविद्यालय अनुदान आयोग
बहादुर□ाह जफर मार्ग
नई दिल्ली–110002
University Grants Commission
Bahadurshah Zafar Marg
New Delhi-110002

No. F. 16-1/2006(INNO./ASIST/Misc)

16th November, 2006

Professor. S. Aravamudhan,
Head-of-the Department of Chemistry,
North Eastern Hill University,
P.O. NEHU Campus,
Shillong - 793 022


NORTH-EASTERN HILL UNIVERSITY
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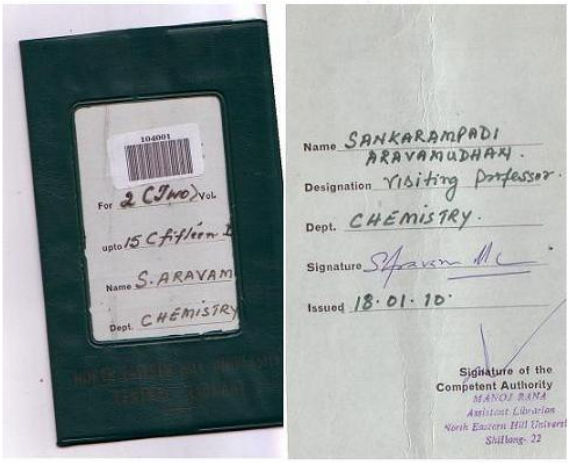
IDENTITY CARD
Name ARAVAMUDHAN SANKARAMPADI
Designation SR. LECTURER
Department CHEMISTRY
Signature
Issuing Authority
Registrar
N.E.H.U.
No. 1449
21.12.2005
Date of Issue

Sub: Regarding proposal submitted under Innovative Programme.

Find below (at lower edge of this imge) a fascimile of ID as issued on 18-01-2010

Sir,

With reference to your letter dated 20.09.2006 addressed to Professors S. Thorat, Chairman, UGC, New Delhi regarding proposal submitted under Innovative Programme, I am directed to say that UGC could not consider your proposal as the Department of Chemistry is already assisted under COSIST (Now ASIST) Programme and secondly, the proposal has not been prepared as per prescribed format. It is further informed that as per guidelines of Innovative Programme , such proposals will not be considered for financial support under Innovative Programme.


For 2 CJNO Vol.
upto 15 Fifteen
Name S. ARAVAM
Dept. CHEMISTRY
Name SANKARAMPADI ARAVAMUDHAN.
Designation Visiting Professor.
Dept. CHEMISTRY.
Signature
Issued 18.01.10.
Signature of the Competent Authority
MANOJ RANA
Assistant Librarian
North Eastern Hill University
Shillong-22

Yours faithfully

(S.C.Vasdeva)
Under Secretary

पूर्वोत्तर पर्वतीय विश्वविद्यालय
पू० प० गिरि० परिसर, शिलांग-७९३०२२ (मेघालय)
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NEHU Campus, Shillong - 793 022 (Meghalaya)

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Pramod Tandon
Vice-Chancellor

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No.F.6-13(21)/Admn/IC-PH/2006-
28th November, 2006

Dear Dr. Aravamudhan,

On your Superannuation with effect from 30th November, 2006 (afternoon), I take this opportunity to wish you health, happiness, and prosperity throughout your post- retirement life.

Your long association with and dedicated service to this University for more than 21 (twenty-one) years will always be remembered.

Yours sincerely,

Pramod Tandon

(Pramod Tandon)

Dr. S. Aravamudhan,
Lecturer,
Departmnet of Chemistry,
NEHU Permanent Campus,
Shillong 793 022.

ARAVAMUDHAN S

Cell: 9862053872 / Mobile: 9862053872 & 8974037417
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CAREER OBJECTIVE: In quest of assignments in Teaching/ Mentoring/ Research & Development/ Operation's with a growth oriented organization.

PROFESSIONAL SUMMARY

⇒ A dedicated Professional in Operations & Administration with over 28 years of rich and insightful experience in Industry and Institution. *Keen interest in Teaching & Research in Chemistry, Specialization "Solid State NMR"*

⇒ Keen planner, strategist & implementer with attained proficiency in resourcefully managing administration related activities. Gained extensive experience in operating and maintaining scientific equipments.

⇒ Adept at analyzing unique problems, with a combination of training experience and logical thinking.

⇒ Result oriented & efficient with strong interpersonal skills.

⇒ **IT Skills:** MS word, MS power point, Excel & SPSS.

⇒ **Skill Set** (Skills acquired by a *'need based learning'* for innovative approach for effective presentations)

- Teaching & tutoring students by planning, preparing and presenting lessons.
- Setting & evaluating assignments /giving feedback for better performance.
- Recognizing, respecting & nurturing the creative potential of each student.
- Training & counseling students in various aspects of their career path.

Publications: Refer to Annexure 1

EMPLOYMENT DETAILS

Demonstrator in Physics, G.A & S College, Chittoor, Andhra Pradesh 1965 – 1966

Post Doctoral Position, Max Planck Gesselschaft, at Max planck Institute fur Medizinische forschung, Abteilung Molekulare Physik. Heidelberg, Germany 1975 – 1977

A Tenure appointment as Wissenschaftliche Mitarbeiter in the Fach Bereich Physik at the Institut fur Atom und Fest Koerper Physik, Free University of Berlin, Berlin Germany 1977 – 1978

As Scientist at National Chemical Laboratory, Pune, India 1979 – 1980

As Research Associate at the Department of Chemistry, Indian Institute of Technology, Kanpur 1982 – 1983

Since 1985, Teaching Physical Chemistry and Research in Magnetic Resonance, Quantum Chemistry as Lecturer in **Department of Chemistry, North Eastern Hill University, Shillong, 793022, Meghalaya**

The date of attaining the age of superannuation: 30-11-2006 http://saravamudhan.tripod.com/Addresspage.html

Correspondence:- **Dr.S.Aravamudhan Ph.D., ExLecturer, Department of Chemistry, N.E.H.U., Shillong 793022, Meghalaya**

EDUCATION

1965 B. Sc (General) Mathematics, Physics, Chemistry from Government Arts and Science College, Chittoor, A.P (affiliated SV University Tirupati)

1968 M.Sc., Physical Chemistry from SV University College, SV University, Tirupati, Andhra Pradesh

1975 Ph.D., Degree, in Chemistry, at Indian Institute of Technology, Kanpur 208016
Thesis title: Experimental Studies in Overhauser Effect in Free Radical Solutions, year 1975
http://www.angelfire.com/art3/saravamudhan/thesis_sa.html

TRAINING PROGRAMS ATTENDED: Participant and resource person in several of the workshops and Refresher courses in Chemistry and the specialization in Magnetic Resonance.

PERSONAL DETAILS

Current Address: Dr.S.Aravamudhan, House No.220, Lower New Colony, Laitumkhrah, PO BOX No.20, Shillong 793003, Meghalaya **Permanent Address**: 26B, MIG Flats, PT Rajan Salai, KK Nagar, Chennai 600 078 TamilNadu

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ANNEXURE 1

I. INDUCED-FIELD CALCULTIONS :IMPACT OF THE RESULTS PRESENTED TILL NOW

To enumerate the cumulative impacts of the topic on which papers are being contributed at international conferences it is necessary to recall that the poster presented at the ***Joint ISMAR-CA'98*** was the material presented at the *NMRS (India) Symposia at IIT/Delhi (1997) and at IISc., Bangalore (1998)* which even in India evoked an interest and later found acceptable alsoto be presented at International conference. This work has yet to be pursued for better results to be conclusive. This effort was to use a Magnetic dipole for Shielding (Induced Fields) calculations and the results till now on this could further substantiate the reproducibility of the Deagnetization factor Calculations by using the same approach and equations for induced field calculations with an additional constraints and equations used for summing over semimicrovolume elements for the whole macroscopic specimen.

While presenting these approaches for the Macroscopic Magnetized Specimen in India at the ***Dehradun,IIP (1999) Symposium*** the abstract could be presented giving the rationale for the necessity of semimicro volume elements and the derived equations inquiring as to whether all these are only a mere mathematical simplification OR can there be more to it. Later the interest from the audience and viewres of posters resulted in presenting the Full explanations and calculation of Demagnetization factor and its reproducibility and these were the considerations at the *NMRS Symposia at TIFR,Mumbai (2000) and at Chennai,CLRI/IITM (2001)* which were summarised as POSTER presentation at the ***2nd Alpine Conference on Solid State NMR ,Chamonix Mont-Blanc,France (2001)***. Soon after there were messages received from the participants expressing much interest in the material and these materials are being more carefully studied by them as per the messages, from the point of view of the posiible applications indicated.

The presentations at ***XIII International Biophysics Congress, New Delhi (1999) and in the XIV IBC at Buenos Aires,Argentina (2002)*** have highlighted and explained the induced fields and their calculations from the point of view of Membrane transport studies by NMR methods and further efforts to improve the applicability are being pursued. The purpose of all the national and international presentations is being more and more substantiated by the interest of the Organizers (National &International) of Conferences. The explanations for the workability of this simple procedure for induced calculations raises a few questions which must be clarified and explained before detailed application of the method. In ***Feb 2003 in the National Symposium on Biophysics***, a typical consideration of a aromatic-ring susceptibility tensor was used to illustrate the consequences of induced fields calculated in the tensor form at a point nearby the ring.

On the basis of the simple procedure being used for the calculation of Induced Fields due to the magnetized specimen in the regions inside and outside this Uniformly magnetized Specimen and the inferences based on the already known demagnetization effects, an inquiry was put forth as to what really are the criteria for the specimen shape and the shape for the semimicro volume element (a cavity) would apply to know the trends of field distributions inside a magnetized specimen. This was the content of the oral presentation at the ***NMRS2003 in IISc., Bangalore***. A suggestion could be made in these considerations that if the Lorentz cavity is chosen to be a nonspherical shape , an ellipsoid for that matter, then within this volume element the discrete dipoles would contribute at a nuclear site inside induced fields and, will these trends be the same as it is for spherically shaped Lorentz Cavity?

At the ***3rd Alpine Conference on Solid State NMR, France during Sept 14-18,2003*** the above question could be certain extent answered from the numerical trends from a simple lattice sum calculations for CUBIC & NONCUBIC lattices when a spherical and nonspherical (ellpsoidal) inner volume elements are considered. it seems the Lorentz Cavity need not be only spherical since even for an ellipsoidal shape of comparable semimicro volume element the discrete poit dipoles yielded the same limiting sum value for the total contribution from all the dipoles within the volume element. Hence the Lorentz cavity need not be only of spherical shape. Then for the same dimensions for all cases the CUBIC lattice yielded the same numerical value indicating a near zero contribution but for noncubic lattice the limiting sum varied significantly depending on the relative ratios/magnitudes of the lattice parameters. And even in this ellipsoidal case the limiting values did not depend on the ellipticities for the ellipsoids and all values were close to the nonzero values obtained for the spherical case.

Thus having carified for the situations with regard to the intermolecular lattice contributions at proton sites in the single crystal specimen, now it seems more confidence can be placed while using the magnetic dipole (the Joint ISMAR CA'98 POSTER presentation) for the intramolecular shielding calculations since the comparison with experimentally measured Shielding tensor values would be available with much more certainty.Further reconciliatons of the situation inside the Lorentz Ellipsoids for solid state and liquid state HR PMR studies seems to be due

Magnetization within a material is inhomogeneous for specimen of shapes other than the regular ellipsoids. While discussing the demagnetization effects in a (homogeneously) magnetized sample, it becomes necessary to describe the hypothetical Lorentz sphere (Inner Volume Element: I.V.E.) around a specific site. This has brought in a compulsion that for HR PMR in solids a spherical outer shape for the specimen must be ensured for the possibility that the induced field at a specific site due to bulk susceptibility is zero[1]. The material within the IVE is effectively absent (a cavity) if the contributions of the molecules within this IVE is calculated independently and taken into account finally. Similarly, if the outer macro shape and the inner [IVE] shape are both ellipsoids and with same ellipticity, then the induced field within the inner element can be zero as much as for the spherically shaped sample specimen. Moreover, it has been found that the contribution from the neighboring molecules within the ellipsoidal IVE can be the same as the spherical IVE[2]. For shapes other than ellipsoids, since the magnetization would be inhomogeneous within the sample, calculating contributions at one representative point within the sample would not be enough. Thus, it would be necessary to calculate the induced fields at every one of the points of interest independent of the other points. Even for shapes other than ellipsoidal, if the shape is describable as regular, then an IVE can be carved out with the same shape, and, proportionate shape factors. However, defining a demagnetization factor in such cases, even when it becomes possible, is associated with limitations. Because a simple summation procedure for calculating demagnetization factors is now known[3] it seems it would be possible to consider the case of such inhomogeneously magnetized specimen with much better ease and to use the results with better confidence[4]. If the requirement of single crystal spheres could become less stringent in HR PMR studies in solids then the technique can be applied with much less constraints.

1. http://nehuacin.tripod.com/pre_euromar_compilation/
2. http://www.geocities.com/saravamudhan1944/eenc_ampere_lille.html
3. http://saravamudhan.tripod.com/
4. http://nehuacin.tripod.com/id3.html

The simplest method by which the trends of the contributions to induced fields at a nuclear site can become sensible to a chemist is the most popular point-dipole approximation. Obviously as one begins to learn the application of the point dipole approximation in the contexts of the trends in NMR chemical shifts, it seems at the same time a beginning has been made to learn more about the limitations of this approach. Earlier[1] there had been efforts to point out the approaches to contain the applications in conformity with the limitations. The recent publication[2] on the Biphenyl molecule, using the HR PMR Studies in solids with the theoretical calculations on chemical shifts, seems to be revealing further the conflicts which arise (with indications to possible compromises and reconciliations) while trying to interpret the experimental results.
In this presentation, the salient general features would be enumerated. This would convince that the equations derived using the point dipole approximation justifiably prevails in all the contexts. Considerations of the point dipole approximation is the factor which can resolve conflicts *either* because its application is valid in a specific context *or* because a specific significance gets attributed when the magnetic dipole model does not explain the experimental trends convincingly.

1. S.Aravamudhan, "Investigating the Feasibility of Calculating Intramolecular Shielding Tensors Using Magnetic Dipole Model" , POSTER presented at the Joint ISMAR-CA'98: Section P10 on `*Theoretical Aspects of NMR*' : Page 501-502, Proceedings of the Joint 29th Congress Ampere -13th ISMAR International Conference, Aug. 2-7, 1998, at Technical University, Berlin. http://saravamudhan.tripod.com/id2.html
   http://www.geocities.com/inboxnehu_sa/nmrs2005_icmrbs.html and
   http://www.geocities.com/saravamudhan1944/crsi_6nsc_iitk.html
2. "The proton nuclear magnetic shielding tensors in biphenyl: Experiment and theory", Frank Schönborn, Heike Schmitt, Herbert Zimmermann, Ulrich Haeberlen, Clémence Corminboeuf, Gisbert Großmann, Thomas Heine, in Journal of Magnetic Resonance, Vol. 175, (2005) pages 52-64. (Available online at http://www.sciencedirect.com)

Publications

Required sorting is simple!
IC# stands for International Conferences/Congresses/Symposia -21
NS# stands for National(indian) Symposia/Conferences -27
RJ# stands for Refereed Journals -6
Total = 54 -2 = 52.
In the list below the acronyms **IC, NS, and RJ** occur at the end of the citation of the publication. By the MS WORD/PDF **[Control+F]** find command it will be a simple matter to get the sorted information from the year-wise enumeration of the list.
The required updates of the listing for period after the duration mentioned at the end of this listing, can be found from the Website documentation URL *Top page of website*: http://www.ugc-inno-nehu.com/
"Publishing to the Internet" (following contributions at symposia & conferences) has been found most convenient for communicating the results due to the nature of this work on induced field distributions in magnetized materials.
http://www.ugc-inno-nehu.com/repository.html

Year 2002-2005

21. Induced Field Distributions in Heterogeneous Samples. XIV International Biophysics Congress, Buenos Aires, Argentina, April 27- May 1,2002, POSTER #22-01. IC 9. (Enclosed Abstarct & Particulars)

22. A Simple Summation Procedure for an Involved Integral Evaluation for the Calculation of Proprties dependent on Specimen Shape, Poster Presenation at the 72nd Annual Session of the National Academy of Science ,India held in North Eastern hill University, SHILLONG during November 25-27, 2002 NS 9

23. Can HR PMR Provide Further Insights Into the Requirements of the Spherical Shape for Lorentz Cavity?Oral Presentation>[{ The Microsoft Powerpoint File for this presentation can be down loaded from this LINK }]at the NMRS Symposia at IISc., Banglaore,held in Feb.2003. NS10 (Enclosed Abstarct and Particulars)

24. "Aromatic Ring Current Shifts……." .A Poster Presentation at the National Symposium On Biophysics at theDepartment of Biotechnology, IIT/Roortkee, held in Feb.2003. NS11

25. "Discrete Point-Dipoles within a Semimicro Volume Element:,,,,,,,,,,," , S.Aravamudhan, POSTER presentation at the 3rd Alpine Confernce on Solid State NMR, Chamonix Mont-Blanc, France, Sept 14-18,2003 Poster No:9 IC 10

26. Participation in the NCBS Symposium on "Molecules,Machines and Networks" held at the National Centre for Biological Sciences, TIFR, GKVK Campus, Bangalore 560 065 during January 5-9, 2004 IC 11

27. "Aromatic Ring Current Effects in (Macro-) Biomolecules: Prevailing Forms of Equations and the Proposed Use of Tensor Form for the Shielding of Nuclei" , S.Aravamudhan, POSTER # 41, National Symposium on Cellular and Molecular Biophysics, National Institute of Mental Health and Neuro Sciences, Bangalore Jan 14-17,2004 NS12

28. "A Perspective of the Point Dipole Approximation for the Prospective Intuitive Chemists' Approaches", S.Aravamudhan, POSTER #372, 6th National Symposium in Chemistry of the CRSI, IIT/Kanpur, Feb. 6-8.2004 NS13

29. "Concerning the Specimen Sample-Shape for the Single-Crystal HR PMR studies" , S.Aravamudhan, Oral Presentation, NMRS 2004 Conference, Saha Institute of Nuclear Physics, Kolkata, Feb.17-20,2004 NS14

30. Magnetized Materials: Contributions Inside Lorentz Ellipsoids Known only by HR PMR in Crystalline Solids S.Aravamudhan, Oral presentation at the National Symposium CMDays'04 held at the Department of Physics, North Eastern Hill University, Shillong 25-27 August 2004 (find reference for CMDays'04 proceedings publication below at #42) NS14

31.INDUCED FIELDS AND DEMAGNETIZATION; NUCLEAR SHIELDING AND LINESHAPES IN SOLID STATE NMR, S.Aravamudhan, POSTER Presentation at the Joint event: 17th European Experimental NMR Conference and the 32nd Congress Ampere on Magnetic Resonance and Related phenomena, held at Lille, Frnace during September 6-11, 2004 IC12

32. Partcipated in the International Workshop on Biomedical Magnetic Resonance- IWBMR2005, at the All India Institute for Medical Sciences New Delhi January 12-15, 2005 IC13

33. Disentangling the Bulk Susceptibility Medium-Effects from the Molecular Local Chemical Shift Changes in Heterogeneous Biological Systems, Poster presentation atThe XXI International Conference on Magnetic Resonance in Biological Systems ICMRBS and the NMRS2005 held between 16 and 21 January 2005 in Hyderabad, India. IC14

34. AROMATIC RING CURRENT EFFECTS IN (Macro-) BIOMOLECULES: Prevailing Forms of Equations and the Proposed Use of Tensor Form for the Shielding of Nuclei poster presentation atNational Symposium on "RECENT TRENDS IN MOLECULAR AND MEDICAL BIOPHYSICS"- The IBS2005 held during JANUARY 22-25, 2005 at UNIVERSITY OF PUNE Organized by INDIAN BIOPHYSICAL SOCIETY and DEPARTMENT OF PHYSICS, UNIVERSITY OF PUNE IC15

35.Participated in the International Workshop on Recent Trends in Solid State NMR in Biological Systems to be held during January 24-26, 2005 at I.I.Sc. BangaloreIC16

36.Attended the 7th National Symposium of the "Chemical Research Society of INDIA" C.R.S.I. at the Indian association for the Cultivation of Science during 4-6, February 2005 37.Visit to NCL PUNE during 8-11, February 2005 NS15
Attended the Meeting of the Materials Research Society of INDIA, MRSI2005 at NCL, Pune NS16

38.Induced Fields in Magnetized Materials: Calculations and the Uses Abstract Submitted was accepted for ORAL Presentation at the "REGIONAL CONFERENCE ON MATERIALS AND THEIR APPLICATIONS" Organized by and held at Department of Physics, Manipur University, Canchipur, Manipur, India held during FEB 18-19, 2005. Presentation held on the 18th Feb.2005 NS17

39. Participated and Chaired a Technical session at the Indo-French Workshop on *New Solid-State NMR Methods and Materials Characterization* of the CEFIPRA / IFCPAR **I**ndo **F**rench **C**entre for the **P**romotion of **A**dvanced **R**esearch held at the National Chemical Laboratory, PUNE during July 18-21,2005. IC 17

40. Participated and presented **POSTER P3** "A Consideration of the Enduring Questions for the Possibility of Using Arbitrary Shapes of Specimen for HR PMR Studies in Single Crystalline Solid State" at the 4th Alpine Conference On Solid State NMR *New Concepts and Applications* held in France, Chamonix Mont Blanc, during September 11-15,2005.IC 18

41. Participated and held a lecture at the *Seminar on Emerging Trends in Instrumentation* on Sept. 26, 2005. Title of Lecture: **"Nuclear Magnetic Resonance Phenomenon Adopts Advances in Instrumentation to Ever emerge as an Indispensible Spectroscopic Technique"**NS18

42. *"Magnetized Materials: Contributions Inside Lorentz Ellipsoids"*, S.Aravamudhan, Indian J.Phys., Vol.79(9), p985-989 (2005) This is CMDays04 proceedings special issue [The results are the same as in Ref.# 30 above] RJ6

Year 2006-2007

43. Aromatic Ring Current Shifts: *Implications for Conformations in Presence of Local and Global Torsional Motions With Respect to a Site in Macromolecules*, S.Aravamudhan, POSTER BS019 in Session Biological Spectroscopy at the "National Symposium on Molecules, Interactions and Design: A Biophysical Perspective" *under the aegis of* Indian Biophysical Society, West Bengal University,held at The Saha Institute of Nuclear Physics,Kolkata, January 7-9,2006. NS18

44.Chemical Shift Tensor Determination Entails a Revelation in Condensed Matter Physics S.Aravamudhan, Poster PP-75 for NSC8, presented at the *8th National symposium in Chemistry* of the C.R.S.I. held at IIT/Bombay, February 3-5,2006. NS19

45.Bulk solid specimen shape dependences in the molecular, chemical-shift tensor determinations, S.Aravamudhan, ORAL presentation at the 'International Conference On Molecules to Materials'[CLICK HERE & Jump to Event-III for 'ICMM2006'], held at *Sant Longowal Institute of Engineering and Technology* **S.L.I.E.T.**,Sangrur PIN:148106,Punjab, March 3-6, 2006. A Full Paper has been published in the 'ICMM2006 Conference Proceedings Volume'. IC19

46.An Exposure to the Trends in NMR Techniques for the Static Bio-molecular Structural Information and the Dynamic Transformations During Biological Processes S.Aravamudhan, POSTER presented at the *'National Workshop on Bioinformatics and Computational Biology'* **NWBCB2006**, held at the Banaras Hindu University, Varanasi,March 22-24, 2006. NS20

47. S.Aravamudhan Participated in the, UGC Sponsored - 'National Workshop on Computers in Chemistry', (Cited Herealso in the Web linknbsp;) held at Cotton College, Guwahati, June 5-7, 2006. NS21

48. PERSPECTIVES ON POINT DIPOLE APPROXIMATION: The context of (intermolecular and intramolecular) NMR chemical shifts, S.Aravamudhan, **POSTER PP108** presentation at *'IIT/Madras Annual Chemistry Meet & the First CRSI Mid Year Meeting'*held at IIT/Madras, July 12-13, 2006. NS22

49. SHAPE DEPENDENT FIELD INHOMOGENEITY OF HOMOGENEOUS SPECIMEN: CONSEQUENCES IN HR PMR IN SOLIDS, Sankarampadi ARAVAMUDHAN, presented **POSTER SS8** (Category: Solid State Physics) at the 'EUROMAR2006' held at YORK, UK, July 16-21, 2006. IC20

50. Invited to participate at the MRSFall2006 meeting in Boston, USA; due to the turn of events could not be present at the Conference Venue for the ORAL Scheduled presentation

51. A Perspective for Recognizing Discreteness distinctly from Continuum: Validity of Point Dipole Approximation to Set the Distance Scale , Sankarampadi ARAVAMUDHAN, Poster PP-8, at the 9th National Symposium in Chemistry of the C.R.S.I.. held at Department of Chemistry, University of Delhi, Delhi, February 1-4, 2007 NS23

52. BULK SUSCEPTIBILITY EFFECTS AND NMR CHEMICAL SHIFTS:THE PERSPECTIVE FOR MOLECULES TO MATERIALS , S. ARAVAMUDHAN, Poster P-30, at the NMRS2007 held at National Chemical Laboratory, February 4-8, 2007 NS24

53.POSTER presentation at 2nd Midyear CRSI meeting at IIT Guwahati on 21st July 2007 NS25

54. Participated in Absentia at the EUROMAR2007 Tarragona Spain, July 1-6, 2007 IC21

55. Attended the ONE-DAY Seminar on SYNTHESIS & CHRACTERIZATION of NANOMATERIALS , Jamia Hamdarad University, New Delhi, on 17th November 2007 NS26

56. A STUDY ON THE FEASIBILITY OF A SPIN PRECESSION PICTURE TO DESCRIBE NQR PHENOMENON POSTER presentation [*POSTER P77 (On P179 in the Abstract Book)*]at the NMRS2008 held at INMAS, New Delhi during 16-19 Jan.2008 NS27

57.Participated in the NSC10,at IPC,IISc., Bangalore:1-3 February 2008

58. Participated at the EUROMAR2008 ; Poster Presentation under the category "FRONTIERS"; Poster No: F-17 on "*The Micro-Macro Paradox in Induced Field Calculations and the Role of Solid State NMR*" ; July 6-11, 2008 at St Petersburg, Russia http://nehuacin.tripod.com/id5.html

59. Participated at the Institute Centenary Symposium at IISc., Bangalore on the theme "FUTURE DIRECTIONS IN NMR" held at the NMR Research Centre of the IISc. During Oct. 19-22, 2008 with a Poster Presentation on: *"COMMENTS AND CLARIFICATIONS: CALCULATING INDUCED FIELD DISTRIBUTION IN SPECIMEN WITH INHOMOGENEOUS CONSTITUTION; AND, WHEN THE SHAPE IS NOT REGULAR". Poster No: P-5* http://nehuacin.tripod.com/id6.html

60. Participated in the National seminar on "Toxicity of Chemicals & their Hazards With SPECIAL REFERENCE To Heavy Metals"; delivered an "Invitee Guest Lecture" on "MULTINUCLEAR NMR AND TOXIC HEAVY ELEMENTS", on 24th Oct. 2008 with the presentation of a Poster on the same topic. http://ugc-inno-nehu.com/ToxicHE.html

61. An Abstract submitted for Participation in 96th the Indian Science Congress Session has been accepted for a POSTER presentation in the event to be held in Jan 3-7, 2008 at North Eastern Hill University, SHILLONG.
Website for this event: http://www.isc2009nehu.com/

Dr.S.Aravamudhan attained the age of superannuation (62 years) on 30th November 2006
A revised draft of application for Grant for a Project is being finalized.

Activities as EX LECTURER, Department of Chemistry, NEHU: Currently a molecular dynamics calculation is being envisaged using a PCGAMESS soft ware to be able to know the trends in the inter-molecular approaches and dispositions while the molecules get closer or when they are closely packed. On the basis of this, it would be possible to arrive at appropriate molecular clusters at optimized locations with respect to each other. The position coordinates of such structures can further be used as inputs into calculations using DFT algorithms to find the extent of intermolecular contributions in the cluster of molecules in comparison with the isolated chemical shift values. This approach can be yielding the necessary criteria for improving the applicability of Magnetic Dipole Model for intra and inter molecular Shielding contributions as envisaged in the two references cited at the end of the enumeration under "Impact of Results" in the beginning of Annexure-I above in the resume. An example of the efforts made in this direction is the Video movie file embedded in the webpage:
http://www.geocities.com/saravamudhan1944/ugc_inno_proposal.html
This resume updated on: 26th Oct. 2008

CLCK HERE for an elementary & introductory article by Dr.S.Aravamudhan.
Title: **"NMR as a tool for Structure Determination"**

Significant effort and importance is given for the activities related to the contents in the WebPages with URLs as given:
http://www.geocities.com/saravamudhan1944/ugc_inno_proposal.html
http://www.geocities.com/saravamudhan1944/inno_course_contents.html

The perspectives on Higher Education would further be evident from the contents of URL:
http://in.geocities.com/saravamudhan2002/hrd_mrm.html

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IC# stands for International Conferences/Congresses/Symposia -21
NS# stands for National(indian) Symposia/Conferences -27
RJ# stands for Refereed Journals -6
Total = 54 -2 = 52.
http://technicaleducation.rediffblogs.com

Dr.S.Aravamudhan had been the Pincipal Investigator of a CSIR Research Scheme entitled:
"Shielding Parameters of Nuclei: ....Crystal Structure.............Molecular Electronic Structure"
this Scheme has completed its THREE year TERM on 31-12-2004 http://saravamudhan.tripod.com/csir_schm_sa/id24.html
Applying for Grant after the retirement for the Objective of Comprehending Induced Magnetic Field Distributions in Materials

CLICK HERE http://www.geocities.com/amudhan_nehu/highlights.html to view selected 8 Web Pages of Dr.S.Aravamudhan Displayed as ' FRAMED ' pages in view at a single and same Desktop display.

Dr. S. Aravamudhan, Professor (Adjunct Faculty), North Eastern Hill University, Shillong 793022 http://aravamudhan-s.ucoz.com
http://www.ugc-inno-nehu.com
http://www.ugc-inno-nehu.com/repository.html

When this author started the "internet documentations" (need based) the web-building facilities at the **tripod** webhosting services of LYCOS network and at the **geocities** webhosting services of YAHOO network were availed. Subsequently, the **geocities** services were closed and most of this author's documentations at geocities had to be saved and republished to the appropriate internet webhosts. The internet transfer facility from *geocities* to http://www.ucoz.com extended to the users by the YAHOO, at the instance of final date of closure of geocities has been helpful.
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