Dr. K. LAXMI Name of Faculty Designation Professor Nature of Job/Appointment Regular

Date of Joining 25 - 06- 1998

E-mail klaxmi_chm@cbit.ac.in

Education Qualifications Name of the Degree Class Ph. D Doctor of Philosophy (Chemistry) IITM Awarded

PG Distinction M.Sc. (Inorganic Chemistry Chemistry)

UG B. Sc. Distinction

Work Experience

Professional Memberships

Responsibilities held at Institution

Level

Level

25 Years Teaching Research 25 years

Industry Others

Area of Specialization **Inorganic Chemistry** Life Member of Indian Science Congress Association

Indian chemical Society, Kolkata. 2.

Life member of Indian Society of Technical Education (LM41967).

Life member of Indian association of Chemistry Teachers, Mumbai (IACT) (LM 334).

Life member of international society of teachers and researchers in chemistry.

Worked as Professor and Head of the Department from 30-11- 2016 to till date

Member Academic Council, CBIT 2.

CBIT-NITTTR Committee Member

4. Library Committee Member

5. Disciplinary Committee Member

Anti-Ragging committee Member

Internal Complaints Committee Convener

Institution Development Committee Member

9. Exams & Results Committee Member

10. Class Monitoring Committee Member

11. Anti Sexual Harassment Committee Member

12. Academic Planning & Evaluation Committee Constitution Member.

Chairman Board of Studies, Department of Chemistry, 1. CBIT

2. Member, Anti Ragging Committee, CBIT

Mentor for Induction program to the 1st Year Students 3.

Class In-charge/Teacher at CBIT

Research Guidance

Responsibilities held at Department

Received Best Faculty Award for outstanding contribution Academics and Research Awarded By International Award Ceremony on Academic Excellence Awards [AEA 2023] by Knowledge Research Academy, Coimbatore, Tamil Nadu(An MSME Registered Organization) on 29th October, 2023

> 2. Received "BHARAT RATNA MOTHER TERESA GOLD MEDAL AWARD" from GLOBAL ECONOMIC PROGRESS & RESEARCH ASSOCIATION, INDIA - Tiruvannamalai -Tamilnadu—JUNE 2018.

Awards Received

- Awarded the prestigious Adarsh Vidya Saraswati Rashtriya puraskar National Award of excellence -2018, on 2nd October 2018 by Glacier Journal Research Foundation, GLOBALMANAGEMENTCOUNCIL, AHMEDAB AD.
- Received the letter of recognition on 2nd October 2018 from the governing body of Glacier Journal Research Foundation Ahmedabad.

a. This letter is for recognising the noble work done in the interest of students, teachers and the entire education fraternity.

- b. The letter also gives a distinction of being one of the best teacher in the country.
- Awarded Dr (Mrs) SABITHA MLN REDDY GOLD MEDAL for securing the highest marks in M.Sc CHEMISTRY (FINAL) with 'INORGANIC CHEMISTRY' in 1994.
- Ranked third place among all the successful candidates of the M. Sc Chemistry (all Branches) in the year 1994, under Osmania University.

Courses Handled at Under Graduate / Post Graduate Level.

No. of Papers Published

Projects Carried out

Patents

Technology Transfer

Invited Speaker

UG - Chemistry

National Journals – 18 International Journals – 15

National Conference – 05 International Conferences –

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-01

No. of Books/Chapter Published with details

 Published 'Book Chapter' entitled "Theoretical investigation of Properties of Indoline-2,3-dione-3-oxime using Chemicalize Software" in the international book: Recent Developments in Chemistry and Biochemistry Research. Vol. 6 ,page no.s 155-167

DOI: https://doi.org/10.9734/bpi/rdcbr/v6/2542
Print ISBN: 978-93-48119-35-3,

eBook ISBN: 978-93-48119-69-8

- Dr.K. Laxmi published a book chapter entitled "Structural Elucidation of Drug 1-Hydroxyurea (Hydrea) by Using Argus Lab 4.0.1 Software", in the book Technological Developments in Engineering, Management, Arts and Science (978-93-91697-20-4] published in association with Knowledge Research Academy during December 2023.
- 3. K.Laxmi .Structural Aspects of Indoline-2,3-dione-3-oxime:
 An Approach towards Experimental and Theoretical
 Perspectives New Innovations in Chemistry and
 Biochemistry , Volume Vol. 6, Year 2021, Pages 99-109
- K. Laxmi, Antiepileptic Drug Phenobarbital: A Chemsketch Study New Innovations in Chemistry and Biochemistry Vol. 1, 20 August 2021, pp.26-36 Print ISBN Number: 978-93-91473-81-5 E ISBN Number 978-93-91473-88-4, B P International accepted on 2nd December 2020, Published: 20th August 2021.
- https://doi.org/10.9734/bpi/nicb/v1/3429F.

 K. Laxmi, Determining the Properties of Phenobarbital an

Antiepileptic Drug Using Chemcalise Software, Challenges and Advances in Chemical Science accepted on 4th September 2021.

Completed the following courses of Coursera

- Completed coursera online course of Nanotechnology : A makers course on 31st may 2020 offered by Dukes NC State University
- Science of Écercise on 11th June 2020) offered by university of Colorado
- Completed coursera online course of Science of Well Being on 15th June 2020) offered by Yale University.
- Completed coursera online course of Epidemics the Dynamics of Infectious diseases on 20th June 2020 offered by Penn State University
- Completed coursera online course of Nanotechnology and nanosensors Part 1 on 3rd july 2020, offered by Technion Israel institute of technology
- Completed coursera online course of Quantum Mechanics on 12th july 2020, offered by University of Colorado Boulder
- Completed coursera online course of Nanotechnology and Nanosensors, Part1 on 3rd July 2020 offered by TECHNION Isreal Institute of Technology
- Completed coursera online course of Coursera- Quantum Mechanics on12th July 2020 offered by University of Colorado

Passed the following NPTEL courses

- Passed the NPTEL online certification course of NBA Accreditation and Teaching - Learning in Engineering (NATE) in Jan- Apr 2020 (12 week course) with score of 84 %
- Passed the NPTEL online certification course of "Basics in Inorganic chemistry" in Jan- Apr 2020 (4week course) with score of 77 %.

Faculty Development Programs Organized

 Convenor in the one-week online Faculty Development programme on "Recent trends in advanced Materials Science and Engineering Technology" 8th to 12th march, 2021 organised by Department of Chemistry, CBIT, Hyderabad.

Details of Short-Term Training Programs / Faculty Development Programs / Seminars / Workshops.Other Trainings (Attended and /or organized).

Refresher courses/FDP's/ Short-Term Training Programs Seminars/Workshops

- Participated in the AICTE Recognized Faculty
 Development Programme on Nanomaterials, Sensors and
 Devices Conducted by Applied Science Department from
 16/09/2024 to 20/09/2024 (One Week) at NITTTR,
 Chandigarh
- Participated in One week online FDP on "Quality Education through OBE" organized by Chaitanya Bharathi Institute of Technology, Hyderabada., in association with IEEE Education Society Student Branch Chapter CBIT during 22nd - 27th January 2024
- Participated in Drug Discovery workshop on Carbon nano tubes and micro needles: novel approach for drug delivery systems conducted by Nano Science and Technology Consortium from 23rd -25th January 2024
- Participated in Nanotechnology Workshop on Miniaturization of Porous to Transparent Ceramics for Structural and Functional Applications conducted by Nano Science and Technology Consortium from 01-06-2023 to 02-06-2023
- Participated in Nanobiotechnology workshop on NANOmedX:Future of drug delivery conducted by Nanoscience and Technology Consotorium from 30-10-2023 to 01-11-2023
- Participated in Bioinformatics workshop on Quantitative Structure-Activity Relationship (QSAR) Modeling: A Recent Trend in Drug Design conducted by Nanoscience and Technology Consotorium from 03-11- 2023 to 05 -11-2023
- 7. Participated in Nanotechnology Workshop on Green Synthesis of nanoparticles and biomedical applications conducted by Nanoscience and Technology Consotorium from 19-12- 2023 to 21 -12-2023
- 8. Participated in the Online AICTE Recognized Faculty Development ProgrammeOn Integrated Village Development under Unnat Bharat Abhiyan from17/01/2022 to 21/01/2022 (one Week) Conducted by Rural Development Department,
- Participated in the Online AICTE Recognized Faculty Development Programme on Photonics and Optoelectronic Devices from 21/02/2022 to 25/02/2022 (one Week) Conducted by Applied Science Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on Student Evaluation (Theory and Practical Subject) from 25/10/2021 to 29/10/2021 (one Week) Conducted by Education and Educational Management Department NITTTR, Chandigarh.
- 11. Participated in the Online AICTE Recognized Faculty Development Programme on Green Energy Materials and Technology from 29/11/2021 to 03/12/2021 (one Week) Conducted by Applied Science Department NITTTR, Chandigarh
- 12. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Computer Assisted Design and Manufacturing (CAD/CAM) in clinical diagnosis and therapeutics" from 09/08/2021 to 13/08/2021 at Chettinad Academy of Research and Education sponsored by AICTE Training And Learning (ATAL) Academy
- 13. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Five days FDP on Green Technology &Sustainability Engineering" from 23/08/2021 to 27/08/2021at BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI sponsored by AICTE Training And Learning (ATAL).
- 14. Participated & completed successfully AICTE Training AndLearning (ATAL) Academy Online Elementary FDP on "Novel Nanostructured Mg based alloy forindustrial and biomedical applications" from 30/08/2021 to 03/09/2021 at JAWAHARLAL NEHRU NEWCOLLEGE OF

- ENGINEERING SHIMOGA sponsored by AICTE Training And Learning (ATAL) Academy.
- 15. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Molecular Manufacturing" from 2020-10-19 to 2020-10-23 Organized by Mechanical Engineering Chaitanya Bharathi Institute of Technology. Hyderabad sponsored by AICTE Training And Learning (ATAL) Academy.
- 16. Participated in the online AICTE Recognized Faculty Development Programme on Smart Materials and Nanotechnology from 31/08/2020 to 04/09/2020 (one Week) Conducted by Applied Science Department, NITTTR, Chandigarh.
- 17. Participated in the AICTE Recognized Short Term Course on Energy storage materials from 24/08/2020 to 28/08/2020 (one Week) Conducted by Applied Science department NITTTR, Chandigarh.
- 18. Participated in the online AICTE Recognized Faculty Development Programme on MENTORING AND COUNSELLING from 17/08/2020 to 21/08/2020 (one Week) Conducted by Curriculum Development Centre NITTTR, Chandigarh.
- Participated in the AICTE Recognized Short Term Course on Advances in Laser Technology from 03/08/2020 to 07/08/2020 (one Week) Conducted by Applied Science department NITTTR, Chandigarh.

- Participated in the Online AICTE Recognized Faculty Development Programme on Materials and devices for advanced applications from 27/07/2020 to 31/07/2020 (One Week) Organized by Applied Science Department NITTTR, Chandigarh.
- 21. Participated in the Online AICTE Recognized Faculty Development Programme on Materials characterization techniques from 20/07/2020 to 24/07/2020 (One Week) Organized by Applied Science Department NITTTR, Chandigarh.
- 22. Participated in the Online AICTE Recognized Faculty Development Programme on Energy harvesting devices from 13/07/2020 to 17/07/2020 (One Week) Organized by Applied Science Department NITTTR, Chandigarh.
- Participated in FDP on LaTex & Technical Report Writing organised by Department of mathematics, Kakatiya University, Warangal, in association spoken tutorial Project IIT Bombay, during 25-05-2020 to 30-05-2020.
- 24. Participated in one week FDP on Recent Advances in Material Characterization organised by Mechanical engineering Department, NITTTR, Chandigarh, during 25-05-2020 to 28-05-2020.
- 25. Participated in one week FDP on Waste Management organised by Mechanical engineering Department, NITTTR, Chandigarh, during 08-06-2020 to 12-06-2020.
- 26. Participated in one week FDP on Nanomaterials and their applications organised by Applied Science Department, NITTTR, Chandigarh, during 26-06-2020 to 02-07-2020.
- 27. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "ROAD Response Effectiveness, Organizing Self, Attitudinal Shift, Decision Making" from 2020-9-7 to 2020-9-11 at University College of Engineering, Osmania University sponsored by AICTE Training And Learning (ATAL) Academy.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Green Technology & Sustainability Engineering" from 2020-9-14 to2020-9-18 at National Institute of Technology Jamshedpur.
- 29. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Molecular Manufacturing" from 2020-10-19 to 2020-10-23 Organized by Mechanical Engineering Chaitanya Bharathi Institute of Technology. Hyderabad sponsored by AICTE Training And Learning (ATAL) Academy.
- 30. Participated in the Webinar on Applications of Nature inspired optimization techniques for solving real life problems on 8th October 2020 organised by KPR Institute of technology and Engineering, Institution's Innovation council, MHRD Innovation cell Government of India.
- 31. Participated in the Webinar on Applications of Nature inspired optimization techniques for solving real life problems on 8th October 2020 organised by KPR Institute of technology and Engineering, Institution's Innovation council, MHRD Innovation cell Government of India.
- 32. Participated in the National Webinar on "Quality Enhancement Techniques" organized by IQAC held on 12th September, 2020 organised by A.V.College of Arts, Science & Commerce Hyderabad, Affiliated to Osmania University.
- participated in a three day"International webinar on Pivotal role of Chemistry/Chemical Engineering in Present Scenario -2020" from 20th - 22nd July, 2020, organized by Department of Humanities and Sciences, VNRVJIET, Hyderabad.

- 34. Webinar cum FDP SERIES ON "CURRENT PROGRESS AND FUTURE PROSPECTS OF BIOTECHNOLOGY", organized by the Department of Biotechnology, CBIT, during 08 -06-2020 to 13-06-2020.
- 35. Five-day webinar series on Advances in material sciences and Technology organised by Department of applied sciences and humanities school of Engineering, University of Petroleum and energy studies, Dehradun, during 22-06-2020 to 26-06-2020.
- 36. Participated in one week FDP on "outcome based Education and NBA Accreditation" process (UG) organized by CBIT, during 28-05-2020 to 01-06-2020.

CERTIFICATE OF PARTICIPATION / APPRECIATION

- Lead India Foundation Webinar of Transforming Youth into responsible citizens on 15th August 2021.
- Taken the WEAR A MASK pledge of Government of India on 6th April 2021 and committed herself to the moral responsibility of wearing a mask whenever outside and also to remind others to wear a mask.
- Taken the RASTRIYA EKTA DIWAS PLEDGE of Government of India on 31st October 2020, in order to resolve to make my own contribution to ensure the internal security of my country.
- Taken the Jan Andolan COVID 19 Appropriate Behaviour pledge of Government of India on 11th October 2020 and committed herself to the responsibility of taking all necessary precautions that will prevent the spread of COVID-19.
- successfully participated in the Online Quiz on "NANO TECHNOLOGY on 18th July, 2020 Conducted by SCIENCE DEPARTMENT, MRITYUNJAYA VIDYA PEETHA'S RURAL POLYTECHNIC HAUNSABHAVI (GOVT.AIDED) Hirekerur, Haveri, Karnataka.
- successfully qualified in the National Level E-Quiz Competition in Mathematics on 7/21/2020 organized by The Ramanujan Math Club of CBIT, Department of Mathematics, Gandipet, Hyderabad.
- 7. Successfully attended the India First Leadership Talk webinar with Prof. D.P.Singh ,Chairman UGC on 9th may 2020 by MHRD's Innovation cell.
- Successfully completed COVID- 19 Awareness Quiz on 13th may 2020 conducted online by Department of Information technology, Shri Sant Gajanan Maharaj College of Engineering, Shegaon.
- Successfully completed NAAC Awareness Quiz 2020 on 17th may 2020 with a passing score of 90 % conducted by AISSMS Institute of Information Technology.
- Participated a webinar on CORONA VIRUS DISEASE EVOLUTION(COVID- 19) AND PATHOGENECITY , organized by ISPOR Narayana Pharmacy College Student Chapter and Indian Pharmaceutical Association local branch, Nellore, Andhra Pradesh ,India on 23rd may 2020 .
- 11. Successfully obtained the certificate of appreciation for obtaining the passing score of 80 % 2020 in Quiz Caronavirus –(COVID 19) Awareness Program conducted on 28th may 2020 ,organized by National Service Scheme (NSS),JNTUH College of Engineering, Jagtial.
- 12. Successfully attended the India First Leadership Talk with Dr.Nilesh N Oak ,Expert (Indian Civilization & History) held on 9th may 2020 by MHRD's Innovation cell.
- 13. Obtained certification of Participation for participation in online quiz on COVID-19 organised by Department of



- library and information science, BSA College, Mathura, held on 6th June 2020.
- Successfully attended the India First Leadership Talk with Mrs.Ashwini Deshpande (co-founder & director Elephant Design) held on 6th June 2020 by MHRD's Innovation cell.
- 15. Obtained the certificate of Appreciation for successful completion of "National level Quiz on NAAC" on 6th June 2020, organized by Department of Computer Engineering, PVPP college of Engineering, Mumbai.
- 16. Obtained the certificate of Appreciation for successful completion of "National level Quiz on NBA" on 6th June 2020, organized by Department of Computer Engineering, PVPP college of Engineering, Mumbai.
- 17. Obtained the certificate of Participation in an online webinar on "A systematic statistical approach for optimal solutions of industrial problems" organized by Department of Mathematics, KL Education Foundation on 5th June 2020.
- 18. Successfully attended the India First Leadership Talk with Shri R. Subrahmanyam ,IAS (Secretary, Ministry of social Justice & Empowerment) held on 13th June 2020, by MHRD's Innovation cell.
- 19. Successfully participated in International webinar on "Nanomaterials and Detection Technique of COVID -19" on 7th June 2020, organised by Department of Physics ,Babu Shivnath Agrawal (PG) College ,Mathura.
- 20. Obtained the certificate of Appreciation for successful completion of "National level Quiz on "E- Learning "organized by department of computer engineering, PVPP college of Engineering, Mumbai.held on 15th June 2020.
- 21. Obtained the certificate of Participation in the webinar on "VOCAL FOR LOCAL- Entrepreneurship as a Career Option" organized by the department of Business Management Badruka College P.G Centre on 18th June 2020.
- 22. Actively participated in the webinar on Covid 19 a Pandemic of Coronavirus: underlying chemistry cause to cure held on 15th June 2020 by department of Chemistry Sarojini naidu vanitha mahavidyalaya HYDERABAD
- 23. Certificate of participation in the one day International webinar on Flexible energy Storage devices jointly organised by the centre for nanoscience and technology IST, JNTU, Hyderabad and Dayalbagh Educational Institute Agra on 20th June 2020
- 24. Certificate of participation Successfully completed the online quiz on Engineering graphics on 22nd June 2020, organised by Department of Humanites and Sciences, Sumathi Reddy college of Engineering and Sciences
- 25. Certificate of participation in the One day International webinar on Publishing articles in the scopus indexed journals conducted by CBIT - School of Management studies CBIT, on 24th June 2020
- 26. Participated and successfully completed online quiz of General Mathematics organised by Department of mathematics and humanities, G.Narayanamma institute of technology and science on 25th June 2020
- 27. Successfully participated the online quiz program on covid 19 awareness conducted by National Service scheme NSS of Geethanjali institute of Technology on 26th June 2020
- Certificate of participation Attended successfully in India's Leadership talk with Shri. Dipindra Manocha (Motivational

Details of Journal Publications / Conferences (National and International) from the year 2017 International Journals from the year 2017

- 1. K. Laxmi (2024) "Theoretical Study of Properties of Sulforaphane a Chemo preventive agent using Chemsketch and Chemicalize Software", IJRAR International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.11, Issue 1, Page No pp.195-207, January 2024, Available at: http://www.ijrar.org/IJRAR24A1683.pdf
- K. Laxmi (2023)Effect of injection pressure on exhaust emissions of diesel engine fuelled with LPG,Eco. Env. & Cons. 29 (January Suppl. Issue): 2023; pp. (S341-S346), ISSN 0971-765X, page 341 -346, DOI No.: http://doi.org/10.53550/EEC.2023.v29i01s.052
- 3. K. Laxmi (2022), "Characterization of Ligand N'-[(1E)-1-Phenylethylidene]-1,3-Benzothiazole-2-Carbohydrazide by Using Marvin Sketch 20.8 Software", ORIENTAL JOURNAL OF CHEMISTRY www.orientjchem.org An International Open Access, Peer Reviewed Research Journal, 2022, Vol. 38, No.(1): Pg. 77-84. DOI: http://dx.doi.org/10.13005/ojc/380109, Article Published: 12 Feb 2022.
- 4. K. Laxmi (2022), "CONTROL OF EXHAUST EMISSIONS OF TWO STROKE AND FOUR STROKE COPPER COATED SPARK IGNITION ENGINES", International Journal of Mechanical Engineering and Technology (IJMET) Volume 13, Issue 6, June 2022, pp. 1-10. Article ID: IJMET_13_06_001
- 5. K. Laxmi (2022), "Performance Parameters of Two Stroke and Four Stroke Copper Coated Spark Ignition Engines", GRADIVA REVIEW JOURNAL ,VOLUME 8 ISSUE 6 2022 PAGE NO: 501- 511, DOI:10.37897.GRJ.2021.V7I11.21.49931.
- K. Laxmi (2021), "REDUCTION OF POLLUTANTS FROM COPPER COATED SPARK IGNITION ENGINE WITH ALCOHOL BLENDED GASOLINE", International Journal of Mechanical Engineering and Technology (IJMET) Volume 12, Issue 10, October 2021, pp. 1-10. Impact Factor (2020): 11.2184 (Calculated by GISI), ISSN Print: 0976-6340 and ISSN Online: 0976-6359.
 - DOI: https://doi.org/10.34218/IJMET.12.10.2021.001 © IAEME Publication.
- 7. K. Laxmi (2021), CONTROL OF POLLUTANTS FROM COPPER COATED SPARK IGNITION ENGINE WITH BUTANOL BLENDED GASOLINE, Poll Res. 40 (May Suppl. Issue), S173-S180 (2021), ISSN 0257-8050.
- 8. K. Laxmi (2021), INVESTIGATIONS ON REDUCTION OF EMISSIONS IN SPARK IGNITION ENGINE, International Journal of Mechanical Engineering and Technology (IJMET) Volume 12, Issue 3, March 2021, pp. 1-8.
- 9. K. Laxmi (2020), Study of Structure of Buckminsterfullerene Using Nanotube Modellar Software, International Journal of Scientific Engineering and Science Volume 4, Issue 2, pp. 32-35, 2020. ISSN (Online): 2456-7361.
- 10. K. Laxmi (2019), Control of pollution levels in insulated diesel engine, Eco. Env. & Cons. 25 (November Suppl. Issue), 2019; pp. (S225-S231), ISSN 0971–765X.
- 11. K. Laxmi (2019), Calculation of Properties of Phenobarbital an Antiepileptic Drug Using Chemcalise Software; International Journal of Scientific and Research Publications, Volume 9, Issue 11, November 2019 (ISSN 2250-3153), DOI: 10.29322/IJSRP.9.11. 2019, pp.9524 http://dx.doi.org/10.29322/IJSRP.9.11.2019.p9524.
- K.Laxmi, (2017), "Chemsketch Study of Phenobarbital: An Antiepileptic Drug" in International Journal of Computational and Theoretical Chemistry, Vol. 5, NO.3, 2017, ISSN: 2376-7286 (Print); ISSN: 2376-7308. DOI: 10.11648/j.ijctc.20170503.11.

National Journals from the year 2017

- 1. Laxmi K (2019), "Structural Elucidation of Drug Aspirin by Using Various Software Tools Like Hyper Chem, Argus Lab, ChemSketch, Avogrado and Chemeo Database". Journal of Theoretical & Computational Science Jan 2019, vol5, issue1, DOI: 10.4172/2376-130X.1000163.
- 2. K. Laxmi (2018), "Characterization of Keto and Enol forms of Indoline-2,3-Dione-3-Oxime using Avogadro Software Tool A Theoretical Study" in Orient J Chem 2018, Vol.34, No. (3). Pp. 1270-1277, DOI: http://dx.doi.org/10.13005/ojc/340310.