Edwine Tendong

Curriculum vitae

SN Bose National Center for Basic Sciences,
Block JD Sector III, Salt Lake Kolkata 700106 India
Tel: (+91) 86 97 71 74 86 email: tendong@bose.res.in

Summary

Motivated team player with excellent verbal and written communication skills. Eager to learn from superiors and peers. Proven track record of meeting deadlines and ability to problem-solve under challenging circumstances. Excellent interpersonal and organizational skills. Critical thinker with excellent understanding of soft condensed matter physics, physics of fluids and quantum information physics. Experience in molecular modeling, simulations, first principles calculations of material properties, and excellent computer programming skills.

Experience

2017–present **Research Fellow** , *SN Bose National Center for Basic Sciences*, Block JD Sector 3, Salt-Lake Kolkata 700106, India.

- Authored and co-authored several peer reviewed research papers on properties of fluids under nano confinement and on self assembly behaviour of perovskite nano-particles.
- Presented research findings at numerous international conferences, in form of talks and poster presentations

2016–2016 **Teaching Assistant**, *African Institute for Mathematical Sciences*, AIMS-Cameroon

- Organised an delivered tutorial sessions for the course "Computational Fluid Mechanics".
- Supervised continuous assessment sessions and corrected student's scripts.

2010–2015 **High School Physics Teacher**, *Ministry of secondary Education*, Cameroon

- Planed and delivered quality Physics and Chemistry lessons to high school students
- Organized and supervised student's laboratory work in Physics.
- Organized continuous assessment and graded student's performance.
- Assisted in school administrative duties.

Education

2017–present **PhD. Candidate**, *S N Bose National Centre for Basic Sciences, jointly with Calcutta University,*, Kolkata , India.
Condensed Matter Physics and Material Sciences

2015–2016 **MS.**, *African Institute for Mathematical Sciences*, AIMS-Cameroon.
Masters in Mathematical Science

2012–2014 **MS.**, *University of Dschang*, Cameroon
Masters in Theoretical Physics

2005–2008 **BS.**, *University of Buea*, Cameroon
Bachelors in Physics

Doctoral thesis

title *Properties of materials at interfaces*

advisors Pr. Tanusri Saha-Dasgupta and Pr. Jaydeb Chakrabarti, SN Bose national Centre for Basic Sciences

description Showed that simple liquids confined in nano gaps by dissimilar surfaces, exhibited fast heterogeneous dynamics, which could be exploited for rapid water filtration and in designing implantable drug delivery devices.

Masters thesis

title *Flow rate of emptying tanks*

advisor Dr. Michael Ndjinga, CEA,Sacley,France

description Developed scheme for synchronising flow rate of fluids from separate reservoirs, and applied results in controlling rubber latex and acid mixing process at a local rubber factory.

Computer skills

Programming Languages: Python: ●●●●● Fortran ●●●●◐
C/C++: ●●◐○○ MATLAB ●●◐○○

Molecular Modeling: VASP, Quantum ESPRESSO, LAMMPS, GROMACS

Molecular Visualisation: VMD, VESTA, OVITO, AVOGADRO, PyMOL

Concepts: Parallel programming, HPC, Machine Learning

Language skills

English: ●●●●●
French: ●●●●◐

Publications

- Tendong, E., Saha-Dasgupta, T. and Chakrabarti, J., 2022. Viscoelastic response of fluid trapped between two dissimilar van der Waals surfaces. Journal of Physics: Condensed Matter.

- Tendong, E., Dasgupta, T.S. and Chakrabarti, J., 2020. Dynamics of water trapped in transition metal oxide-graphene nano-confinement. Journal of Physics: Condensed Matter, 32(32), p.325101.

- Fouokeng, G.C., **Tendong, E**., Tene, A.G., Tchoffo, M. and Fai, L.C., 2020. Teleportation of single and bipartite states via a two qubits xxz Heizenberg spin chain in a non-Markovian environment. Physics Letters A, 384(28), p.126719.

- Tchoffo, M., Fouokeng, G.C., **Tendong, E.** and Fai, L.C., 2016. Dzyaloshinskii–Moriya interaction effects on the entanglement dynamics of a two qubit XXZ spin system in non-Markovian environment. Journal of Magnetism and Magnetic Materials, 407, pp.358-364..

Awards and Achievements

2019 **RCS Softmatter Oral presentation Prize**, *International Conference on Complex Fluids and Soft Matter* , CompFlu-2019,Bhopal, India

2017 **Beneficiary, Twas-Bose PhD fellowship** , *SN Bose National Centre for basic sciences* , Kolkata, India

June 2016 **Academic distinction**, *African Institute for Mathematical Sciences*, AIMS-Cameroon

2015 **Beneficiary, Next Einstein Scholarship**, *African Institute for Mathematical Sciences*, AIMS-Cameroon

2010-2012 **Head of State's excellence awards**, *University of Dschang, Cameroon*

Conferences and workshops

Referees

Prof. Tanusri Saha-Dasgupta , Centre Director: SN Bose National Centre for Basic Science, Kolkata, India.

Email: t.sahadasgupta@gmail.com

Prof. Jaydeb Chakrabarti , Head of Department: Chemical,Biological and Macromolecular Sciences, SN Bose National Centre for Basic Science, Kolkata, India.

Email: jaydeb@bose.res.in

Prof. Mama Foupouagnigni, Academic Director: African Institute for Mathematical Sciences, Cameroon

Email: mfoupouagnigni@aims-cameroon.org

Interests

Health Bicycling, Running, Juggling