

# CURRICULUM VITAE

**DJUIDJE KENMOE GERMAINE, Ph.D.**

## 1. PERSONAL DATA

### 1.1 NAME:

Germaine DJUIDJE KENMOE

### 1.2 BIRTH DATE AND NATIONALITY:

**Birth date:** August 02, 1973

**Nationality:** Cameroonian

### 1.3 SEX AND MARITAL STATUS:

Female, married with ALOYEM KAYE Claude Vidal on January 2001, 05 Children

### 1.4 ADDRESS:

Department Of Physics

Faculty of Science

University of Yaounde 1

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### 1.5 EDUCATION

-Ph/D., University of Yaounde 1, Cameroon, 2007

Thesis topic: Models for the study of the nanotribology: friction and stick-slip phenomena

Thesis advisers: Prof. Timoleon Crepin KOFANE

-Second Grade Professor Diploma of Secondary Education (DIPES II ), University of Yaounde 1, Higher teacher's *Training College, University of Yaounde 1, Cameroon, 2001*

-DEA, University of Yaounde 1, Cameroon, 2000

-Master's degree Diploma of Physics, *University of Yaounde I, Cameroon, 1998.*

-Bachelor in Physics, University of Yaounde 1, Cameroon, 1995

### 1.6 PROFESSIONAL EMPLOYMENT

**2016-until now :** Associate Professor, University of Yaounde I, Department of Physics, Cameroon.

**2010-2015 :** Senior lecturer, University of Yaounde I, Department of Physics, Cameroon.

**2008-2009 :** Assistant lecture, University of Yaounde I, Department of Physics, Cameroon.

**2007-2008:** Part-time lecturer, IUT Fotso-Victor, University of Dschang, Cameroon.

**2001-2007:** Teacher of Physical Sciences at Government High School, Bayangam, Cameroon.

**1999-2000 :** Teaching Assistant, University of Yaounde I, Department of Physics, Cameroon.

### 1.7-RESEARC INTERESTS

- Friction and stick-slip phenomena

- Non-linear dynamics and Chaos
- Stochastic processes
- Polymer brushes

## **1.8 REFERENCES**

- Prof. Dr. Timoleon Crepin KOFANE, Department Of Physics, Faculty of Science, University of Yaounde 1, P.O. Box 812 Yaounde, Cameroon, e-mail: [tkofane@yahoo.com](mailto:tkofane@yahoo.com)
- Prof. Dr. Aurelien KENFACK JIOTSA, Department Of Physics, *Higher Teacher's Training College* , University of Yaounde 1 P.O. Box 47 Yaounde, Cameroon. email: [kenfack@yahoo.com](mailto:kenfack@yahoo.com)
- Prof. Dr. Martin H. MÜSER, Jülich Supercomputing Centre Institute for Advanced Simulation FZ Jülich, P.O. Box 52425 Jülich, Germany, e-mail: [m.mueser@fz-juelich.de](mailto:m.mueser@fz-juelich.de)
- Prof. Dr. Nicola Manini, Professor, University of Milan, Via Celoria 16 - 20133 Milano – ITALY e-mail: [nicola.manini@fisica.unimi.it](mailto:nicola.manini@fisica.unimi.it)

## **2. COURSES TAUGHT AND OTHER SERVICES PROVIDED**

### **2.1 COURSES TAUGHT**

- Classical Mechanics L1 (2008-until now)
- Quantum Mechanics (exercises) L3 (2010-2015)
- Electrocinetics L1 (2015-until now)
- Acoustic and Dynamics of Continous Systems M1 (2008-until now)
- Practical Physics L1 (2010-2015) in charge of organizing of the practical courses
- Practical Physics L2 (2010-2015)
- Practical Physics L3 (2014-2016)
- Electrostatics (exercises) L1 (2010-2015)

### **2.2 SUPERVISION OF MASTER THESES**

I have supervised master's students

### **2.3 SUPERVISION OF Ph.D. Students**

1. student: DJIHA TCHAPTCHET Eric (co-supervision with Prof. T.C. KOFANE )  
subject of the thesis: “ *Thermal effect on atomic friction* ”, Defence : on going
2. student: TAKOUTSING Cédric Simplicie (co-supervision with Prof. T.C. KOFANE )  
subject of the thesis: “ *Angular dependence of atomic friction* ”, Defence : on going
3. student: WADOP NGOUONGO Yannick Joël (co-supervision with Prof. T.C. KOFANE )  
subject of the thesis: “ *stochastic resonance processes*” Defence : on going
4. student: FOPOSSI MBEMMO André Marie (co-supervision with Prof. T.C. KOFANE )  
subject of the thesis: “ *Transport and Diffusion Phenomena* ”, Defence : on going
5. student:Carine Feuzing Kamkui  
(co-supervision with Prof. T.C. KOFANE )  
subject of the thesis: “ *Superlubricity in incommensurate systems* ”, Defence : on going
6. student: Nelly Ariane DONFACK TSAGNI  
subject of the thesis: “ *Anomalous transport and diffusion in two-dimensional channel* ”,  
Defence : on going

### **2.4 ADMINISTRATIVE SERVICES**

- Members of the specialized scientific commissions of the consultative committee of university institutions in Cameroon since 2017
- vice-president of the examination board in Bachelor degree Level1 since 2017
- vice-president of the examination board in Master degree 2015-2017

### 3.PUBLICATIONS

#### 3.1.PUBLICATIONS IN REFEREED JOURNALS (with editorial board)

- 17- E.Djiha Tchaptchet, G.Djuidjé Kenmoé and T. C. Kofané, *Effect of substrate shape on friction regimes and on tip jump probability in atomic scale friction.* Journal of Tribology **140** (2018) 031606-1,8
- 16- A. M. Fopossi Mbemmo, G. Djuidjé Kenmoé and T. C. Kofané, *Normal and anomalous transport phenomena in two-dimensional NaCl, MoS<sub>2</sub> and honeycomb surfaces.* Physica A **496** (2018) 1–8
- 15- C.S. Takoutsing, G. **Djuidjé Kenmoé** and T.C. Kofané, *Effects of anisotropy and substrate shape on atomic friction force in two-dimensional model.* Tribol. Lett. **67** 107(2017)
- 14- A.M. Fopossi Mbemmo, **G. Djuidjé Kenmoé** and **T. C. Kofané**, *Shape Potential Effects on Transport and Diffusion Phenomena. Fluctuation and Noise Letters* **16** 1750011(2017)
- 13- **Y. J. Wadop Nguongo**, **G. Djuidjé Kenmoé**, **T. C. Kofané**, *Effect of coupling on stochastic resonance and stochastic antiresonance processes in a unidirectionally N-coupled systems in periodic sinusoidal potential.* Physica A **472** 25–31, (2017).
- 12- A.M. Fopossi Mbemmo, **G. Djuidjé Kenmoé** and **T. C. Kofané**, *Anomalous transport and diffusion phenomena induced by biharmonic forces in deformable potential system.* Eur. Phys. J. B , **89** 211(2016)
- 11- **G. Djuidjé Kenmoé**, **Y. J. Wadop Nguongo** and **T. C. Kofané**, *Effect of the potential shape on the Stochastic Resonance Processes.* J. Stat. Phys, **161**, pp 475-485 (2015)
- 10- E. Djiha Tchaptchet. , **G. Djuidjé Kenmoé**, *Velocity and forced excitation effects on atomic friction with deformable substrate.* Nonlinear Dynamics, **82**, pp 961-969 (2015)
- 9- Paul Ndy Von Kluge, **Djuidjé Kenmoé** **Germaine**, **Kofané Timoléon Crépin**, *Dry friction with various frictions laws: from waved modulated orbit to stick-slip modulated.* Modern Mechanical Engineering **5** 28-40 (2015)
- 8- Sissi de Beer, **G. Djuidjé Kenmoé** and Martin H. Müser, *On the friction and adhesion hysteresis between polymer brushes attached to curved surfaces: Rate and solvation effects.* Friction **3** 148-160 (2015).
- 7- **G. Djuidjé Kenmoé**, C.S. Takoutsing and T.C. Kofané, *Angular dependence of atomic friction with deformable substrate.* Eur. Phys. J. B **88** (1)21, (2015)
- 6- **G. Djuidjé Kenmoé**, E. Djiha Tchaptchet and T. C. Kofané, *Thermal effect on atomic friction with deformable substrate.* Tribol. Lett. **55** 533-542 (2014)
- 5- M. Motchongom-Tingue, **G. Djuidjé Kenmoé** and T.C.Kofané, *Smart dampers control in a Remoissenet-Peyrard substrate potential.* Nonlinear Dynamics **69** 379-389 (2012).
- 4- M. Motchongom-Tingue, **G. Djuidjé Kenmoé** and T.C.Kofané, *Stick-slip motion and static friction in a nonlinear deformable substrate potential.* Tribol. Lett. **43** 65-72 (2011)
- 3- **G. Djuidjé Kenmoé**, A. Kenfack Jiotsa, T.C. Kofané, *Nonlinear spring model for frictional stick-slip motion .* Eur. Phys. J. B **70**, 353-361(2009).
- 2- **G. Djuidjé Kenmoé**, T.C. Kofané, *Frictional stick-slip dynamics in a nonsinusoidal Remoissenet-Peyrard potential.* Eur. Phys. J. B **55**, 347-354(2007).
- 1- **G. Djuidjé Kenmoé**, A. Kenfack Jiotsa, T.C. Kofané, *Stick-slip motion in a driven two-nonsinusoidal Remoissenet-Peyrard potential.* Physica D **191**, 31(2004).

### **3.2. BOOK AND BOOK CHAPTER**

-**G. Djuidjé Kenmoé**, *Frictional stick-slip phenomena*, Lambert Academic Publishing ISBN 978-3-8443-0973-7, (2011)

- **Djuidjé, K. G., Kofané, T. C.**, *Frictional stick-slip dynamics in a deformable potential*. In Bhushan, B. (ed.), *Scanning Probe Microscopy in Nanoscience and Nanotechnology*, Vol. 2, Springer-Verlag, Heidelberg, 533-549 (2011)

### **4. OTHER PROFESSIONAL ACTIVITIES**

#### **4.1 AWARDS AND FELLOWSHIPS**

4- 2018 OWSD-Elsevier Foundation Awards Early-Career Women Scientists in the Developing World.

3-Special Excellence Academic Award of the Higher Education Ministry, Cameroon (2015)

2-TWAS-DFG Cooperation Visit Award, Germany (2013)

1-Short visit research Award, ICTP-Italy (2012)

#### **4.2. VISITING POSITIONS**

-Visit research at the Institute for Advanced Simulation, Jülich Supercomputing Centre, Germany 23/05/2013 to 22/08/2013, TWAS-DFG Cooperation Visit Award, under the supervision of Prof. M. Müser.

-Short visit research at the Condensed Matter Section, ICTP-Italy 05/08/2012 to 05/09/2012

#### **4.3. PARTICIPATION IN CONFERENCES AND SCHOOL**

8- International Nanotribology Forum, Friction and wear at the nanoscale, 6-10 January, 2014, Bolgatty Palace and Island Resort, Cochin, Kerala, India.

Oral Presentation: Thermal effect on atomic friction with deformable substrate.

7-Conference on Friction and Energy Dissipation in Man-made and Biological Systems

5 - 8 November 2013 ICTP, Trieste – Italy.

Poster: From bottle-brush to conformal-contact sliding: Polymer brush friction in curved systems

6-School on Large Scale Problems in Machine Learning and Workshop on Common Concepts in Machine Learning and Statistical Physics 20 - 31 August 2012 ICTP, Trieste – Italy.

5-International School on Non-linear Dynamics in Complex Systems, 31 October – 11 November 2011, Yaoundé-Republic of Cameroon.

Contributed talk: Role of substrate geometry in stick-slip phenomena

4- Joint ICTP-FANAS Conference on Trends in Nanotribology, 12 - 16 October 2011, ICTP, Trieste – Italy.

Poster: Substrate geometry and static friction

3-Third Hands-on Research in Complex Systems School, 02-13 August 2010, Buea-Republic of Cameroon

Poster: Stick-slip dynamics of a particle between two deformable corrugated surfaces

2- Joint ICTP-FANAS Conference on Trends in Nanotribology, 19 - 24 October 2009, ICTP, Trieste – Italy.

Poster: Friction and Stick-slip Phenomena in a Nonsinusoidal Remoissenet-Peyrard Potential

*I-Outils informatiques dans la recherche en systèmes dynamiques complexes  
CIMPA-UNSA-CNRS-UNESCO-CAMEROUN , 5-19 avril 1999, Yaoundé (Cameroun)*

#### **4. MEMBERSHIP AND ACTIVITIES IN ASSOCIATIONS**

##### **4.1. PROFESSIONAL ASSOCIATIONS**

- Association pour la Promotion Scientifique de l'Afrique (APSA), Member
- African Network for Solar Energy (ANSOLE), Member
- Cameroon Physical Society (CPS), communication service.

##### **4.2. COMMUNITY SERVICES**

- APLES (VICE-TREASURER)
- Evangelical church of ESSESSALAKOK

#### **5. LANGUAGES**

- Fluent in French
- English: reading (very good); writing (very good); speaking (good)

#### **7. COMPUTING EXPERIENCE**

- Current OSs: linux, MS Windows
- Programming: c++, fortran, Mathematica, Matlab, python, unix shell
- Editors/utilities: latex, xmgrace, gimp, libreoffice