

Mobility Report

From May 22 to June 4 in 2022, Professor Paata Kervalishvili and Ass. Professor Tamar Berberashvili of the Department of Engineering Physics of GTU were at Paris-Saclay University (Paris, France) within the Erasmus+ project. Their visit included lectures and seminars at the Institute of Molecular Science and at Physical Chemistry Laboratory, as well as special meetings for the organization of joint scientific and technical projects.

Professor Paata Kervalishvili's lectures and seminars covered the following topics for Master students (16 hours):

1. Isotope effects in condensed matter: some applications

OUTLINE:

Foreword

Chapter 1 - Isotope Effects in Different Physical and Chemical Processes;

Chapter 2 - Isotope effect in process of laser plasma deposition;

Chapter 3 - Isotope effect in Boron and Carbon thin solid films and its usage for sensory applications;

Chapter 4 - Quantum computation processing based on ^{31}P nuclear spin qubit in a ^{28}Si nanowire;

Conclusion.

2. Vibrational properties of nanobio particles and concept of resonance therapy

OUTLINE

Foreword

Chapter 1 - Vibrational Spectroscopy and Biochemical Oscillators

Chapter 2 - Nano-sized biological agents and pathogens

Chapter 3 - Computational Methods of Investigation of Spectroscopically Interrogating Nanobiosystems

Chapter 4 - Nonlinear Two-Color Sum-Frequency Generation Spectroscopy and Raman Spectroscopy

Chapter 5 - Bio-Resonance Therapy (BRT)

Chapter 6 - Concept of Resonance Therapy of Pathogenic Organisms

Conclusion

Associate Professor Tamar Berberashvili's lectures included the following topics for Master students (8 hours):

L.1. - Vibration and oscillation of molecules;

L.2. - Modern methods of studying bionanoobjects;

L.3. Vibrational spectroscopy;

L.4. Nuclear resonance vibration spectroscopy.

Her Seminars were related to the discussion of the role and future of vibrational spectroscopy (8 hours):

a) Spectroscopy of nanosystems;

- b) Resonance methods of investigations of nanobioparticles;
- c) Computational Methods of Investigation of Spectroscopically Interrogating nanosystems;
- d) Quantum methods in Resonance spectroscopy;

The international seminar "Vibrational properties of nanobioparticles and concept of resonance therapy", was held in the hall of the Institute of Molecular Science.

<http://www.ismo.universite-paris-saclay.fr/spip.php?article2673>

Vibrational properties of nanobioparticles and concept of resonance therapy

par Paata KERVALISHVILI

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Vibrational Spectroscopy and Biochemical Oscillators

Nano-sized biological agents and pathogens

Computational Methods of Investigation of Spectroscopically Interrogating Nanobiosystems

Nonlinear Two-Color Sum-Frequency Generation Spectroscopy and Raman Spectroscopy

Bio-Resonance Therapy (BRT) and Concept of Resonance Therapy of Pathogenic Organisms

English | français

CPPS | LASERLAB-EUROPE

The screenshot shows the website for the Institut des Sciences Moléculaires d'Orsay (ISMO). The page features a navigation menu on the left with categories like 'ABOUT US', 'RESEARCH TEAMS', 'TECHNICAL SUPPORT', 'ADMINISTRATION', 'TEACHING', and 'INTERNSHIP, PHD AND POST-DOC OFFERS'. The main content area is titled 'Séminaire de Paata KERVALISHVILI (3 juin)' and includes the following text:

Home > Seminars > Année 2022 > Séminaire de Paata KERVALISHVILI (3 juin)

Séminaire de Paata KERVALISHVILI (3 juin)
Georgian Technical University , Engineering Physics department
 by Martrenchard-Barra Séverine - 30 May (modifié le 31 May)

Le séminaire sera diffusé en visioconférence. Les personnes extérieures au laboratoire qui souhaitent y assister sont invitées à envoyer un mail à l'adresse
seminaires.ismo@universite-paris-saclay.fr

Elles recevront le lien pour se connecter en retour.

Vibrational properties of nanobioparticles and concept of resonance therapy
 Vibrational Spectroscopy and Biochemical Oscillators
 Nano-sized biological agents and pathogens
 Computational Methods of Investigation of Spectroscopically Interrogating Nanobiosystems
 Nonlinear Two-Color Sum-Frequency Generation Spectroscopy and Raman Spectroscopy
 Bio-Resonance Therapy (BRT) and Concept of Resonance Therapy of Pathogenic Organisms

It was decided that the exchange of students in different directions will continue between GTU and the University of Paris. In the coming years, a joint project will also be presented within the framework of the EU program.



Picture 1. From left to right: Thomas Pino (Director of ISMO), Ludivine Houel-Renault (Head of lab), Prof. Paata Kervalishvili (GTU), Anna Kekelidze (PhD student, GTU) and Ass. Prof. Tamar Berberashvili (GTU) after international seminar at the Institute of Molecular Science



Picture 2. From left to right: Ass. Prof. Tamar Berberashvili (GTU), Lazare BUTON (International Credit Mobility Officer, Paris-Saclay University), Anne-Lise Braesch (Incoming mobility coordinator/Incoming student mobility coordinator, Department of International and European Relations, Paris-Saclay University), Prof. Paata Kervalishvili (GTU) at Department of International and European Relations/International and European Affairs, Paris-Saclay University, Building 300.



Pictures 2, 3. Prof. Paata Kervalishvili (GTU) at Department of International and European Relations/International and European Affairs, Paris-Saclay University, Building 300.