

Curriculum Vitae
Prof. Dr. Hassan RABAÂ

Rennes University (France)	Ph.D.	1985-1987	Theoretical Chemistry
M ^{ed} V University (Morocco)	State Thesis	1987-1991	" "
Cornell University (USA)	Postdoctoral	1999-2000	Physical Inorganic Chemistry
Ibn Tofail University (Morocco)	Assistant Prof.	1987-1991	Chemistry
Ibn Tofail University (Morocco)	Full Professor	Since 1995	

A. Address:

Office: *Department of Chemistry, ESCTM, Faculty of Sciences, University Ibn Tofail, P.O. Box 133, Kenitra 14000, Morocco.*

B. APPOINTMENTS: 2003-present: Head of team of spectroscopy and theoretical chemistry.
ESCTM

C. SELECTED PRODUCTS: Theoretical chemistry

Five Most Relevant Products:

- a. Insights into Molecular Structures and Optical Properties of Stacked, $[Au_3(RN=CR')_3]_n$ Complexes: Hassan Rabaâ, Taubert Stefan, Mohammad Omary, Dage Sundholm., *Inorg. Chem.* 2018, 57, 2, 718-730.
- b. Computational studies of meso-substituted 3,3-dimethylindolenine dibenzotetraaza[14] annulene Ni(II) complexes. H, Rabaâ, A, Balch, M. Olmstead and D. Sundholm. *Journal of Physical Chemistry A* 2015, 119, 21,
- c. Synthesis, Spectroscopic Properties, and Photoconductivity of Black Absorbers Consisting of Pt(Bipyridine)(Dithiolate) Charge Transfer Complexes without and with Nitrofluorenone Acceptors. C. Browning, J. Hudson, E. W. Reinheimer, F.-L. Kuo, R. N. McDougald, Jr., H. Rabaâ, H. Pan, J. Bacsa, X. Wang, K. R. Dunbar,, N. D. Shepherd, M. A. Omary. *J. Am. Chem. Soc.*, 2014, 136, 16185–16200.
- d. Gold II theoretical mechanistics study, H. Rabaa K. Barakat, M. Omary T. Cundari. *J. Phy. Chem. B.* 2006, 110, 14645.
- e. Water adsorption on ZnO (1010) : From single molecules to partially dissociated monolayers. B. Meyer, H. Rabaa, D. Marx . *Phys. Chem. Chem. Phys.* 2006, 8, 1513-1520.
- f. Combined tight-binding/DFT investigation of the electronic structure of triimine-platinum(II)/TCNQ extended stacks. Rabaa, H.; Cundari, T. R.; Omary, M. A. *Canadian J. Chem.*, 2009, 87, 777-783.
- g. *Molecular Structural Analysis of Sb₂O₅-proteines in aqueous medium using DFT methods , Hassan Rabaâ, Andriy, Iryna Grafova. In preparation 2019.*

D. Five Most Relevant

- a. H-H and C-H Activation Reactions at d⁰ Metal Centers. H. Rabaâ, J.-Y. Saillard, R. Hoffmann, *J. Am. Chem. Soc.* 108, 1986, 4327, 4333.
- b. H. Rabaâ, J.-Y. Saillard, A. Le Beuze, D. Astruc, M. Lacoste, G. Précigoux, C. Courseille, N. A. Ardoin, W. Bowyer, *J. Am. Chem. Soc.* , 1990, 112, 9548-9557.
- c. M. H. Desbois, D. Astruc, H. Rabaâ, J.-Y. Saillard, A. Le Beuze. A. H. Cowley. *J. Am. Chem. Soc.* 1995, 118, 4133-4141.
- d. Periodic and Molecular Modeling Study of Donor-Acceptor Interactions in (dbbpy)Pt(tdt)3TENF and [Pt(dbbpy)(tdt)]₂ 3TENF. T. R. Cundari,

B. Chilukuri, J. M. Hudson, C. Minot, M. A. Omary, H. Rabaa. *Organometallics*. 2010, 29, 795–800.

e. Theoretical approach of ionic conductivity in phosphorus oxynitride compounds. H. Rabaâ, R. Hoffmann, J. F. Sanz, *J. Solid . State .Chem*. 2001, 161, 73-79.

E. SYNERGISTIC ACTIVITIES:

Distinction awards:

- Project-EU **2016**. as Moroccan member coordinator, Helsinki, Finland.
- Project-Calculation awards **2017-2018**, University of Helsinki, **Finland**,
- Project-Calculation awards **2014-2015**, University of DAVIS, **USA**
- Participation in different NSF-UNT (Prof. Omary and Cunday) projects 2005, 2008 and **2015. USA.**
- Fulbright Senior Scientist in **2000** (Cornell University) **USA.**
- Fulbright Senior Scientist in **2005** (UNT University) **USA.**
- DAAD in **2002** and **2007**, Bochum and Heidelberg universities, **Germany.**
- ICMAMPD **1998**, Seville University, **Spain**
- Abdus Salam Price in 2001, Third World Academy of Sciences, Trieste, **Italy.**

Last Research Support:

head or participant of:

- **project Helsinki university in 2014-2015 Finland.**
- **Action integree CNRS –CNRST, 2010-2014**, Rennes1 (France) and Ibn Tofail University, LCTA, Morocco.
- **Convention CSIC-CNR 2000-2003** between Seville University and Ibn Tofail University, LCTA, Morocco.
- Action integree CNRS –CNRST, 1995-1999**, Rennes1 (France) and Ibn Tofail University, LCTA, Morocco
- **Convention CSIC-CNRI 2001-2003** between Florence University, Italy, and Ibn Tofail University, LCTA, Morocco.

F. Most important publications and communications. 78 articles and communications:

G. Other professional activities, workshops and seminars

International communication: 10

Organisation of meeting au MAROC: 10

Head or participant.

[1] International Congres of theoretical chemistry, Kenitra , Morocco, **Mars 2017.**

<http://icctm.uit.ac.ma/>

[2] Organization of conference At Ibn Tofail University with the presence of the Nobel Price Prof. Roald Hofmann, Cornell, USA., , **November 2015.**

1- **Member of Faculty advice, 2014-2017.**

2- **Divers theoretical chemistry courses: manuscript for graduate and undergraduate students .**

H. Director of graduate students: thesis or Master: more 40