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Education

2003 : Research Habilitation Thesis (HDR): Atmospheric Chemistry and Combustion Chemistry University of REIMS

1988 :Ph-D thesis – Combustion Chemistry of hydrocarbons . Pierre et Marie Curie University, Paris 6.

1985 :DEA , Cinétique chimique Appliquée Pierre et Marie Curie Paris 6 university.

Research Interests

Atmospheric chemistry, Environmental Chemistry, Physical Chemistry, Chemical kinetics, Photochemistry, combustion chemistry, degradation of pesticides in atmosphere , Electrochemical degradation of pesticide in water.

Recent publications

P1- G. El Dib, C. Sleiman, A. Canosa, D. Travers, T. Sawaya, I. Mokbel, **A. Chakir** "Gas-phase rate coefficient for the reaction of OH with 4-Hydroxy 2-Butanone (4H2B) at 294 K: First absolute experimental determination using vapour pressure measurements of 4H2B in the range 254 - 323 K", J.PhysChem A, (in press).

P2- Detoxification of Bupirimate Pesticide in Aqueous Solutions by Electrochemical Oxidation. M. Errami, O. ID El Mouden, R. Salghi, M. Zougagh, A. Zarrouk, B. Hammouti, **A. Chakir**, S.S. Al-Deyab, M. Bouri. Der PharmaChemica, 2012, 4 (1):297-310

P3- Gas phase UV absorption cross-sections for a serie of hydroxycarbonyls
L. Messadia, G. El Dib, A. Ferhati, E. Roth and **A. Chakir**
Chem. Phys. Lett. 529 (2012) 16-22

P4- Electrochemical degradation of buprofezin insecticide in aqueous solutions by anodic oxidation at Boron-Doped Diamond electrode. Mohamed Errami, Rachid Salghi, Mohammed Zougagh, Abdelkader Zarrouk, El Houcine Bazzi, **Abdelkhaleq Chakir**, Hassan Zarrouk, Belkheir Hammouti, Lahcen Bazzi. Research on Chemical Intermediates. (2012) DOI 10.1007/s11164-012-0574-1.

P5- Pesticide Residue Levels in Peppers cultivated in Souss Masa Valley (Morocco) after Multiple Applications of Azoxystrobin and Chlorothalonil. O. Id El Mouden, R. Salghi, M. Zougagh, **A. Chakir**, M. El Rachidi, Lh. Bazzi, A. Hormatallah. International Journal of Environmental Analytical Chemistry. DOI: 10.1080/03067319.2012.656097,2012

P6- Electrooxidation of cypermethrin pesticide: A Comparative Study of SnO₂ and Boron Doped Diamond Anodes. H. Bouya, M. Errami, R. Salghi, A. Zarrouk, A. M. Assouag, H. Zarrok, **A. Chakir**, B. Hammouti, S. S. Al-Deyab. *J. Chem. Pharm. Res.*, 4(7) (2012) 3468-3477.

P7- Electrochemical combustion of insecticides endosulfan and deltamethrin in aqueous medium using a boron-doped diamond anode .M. Errami, R. Salghi, A. Zarrouk, **A. Chakir**, S. S. Al-Deyab, B. Hammouti, L. Bazzi, H. Zarrok. *Int. J. Electrochem. Sci.* 7 (2012) 4272 – 4285.

P8- Electrochemical Degradation of Cypermethrin Pesticide on a SnO₂ Anode. H. Bouya, M. Errami, R. Salghi, Lh.Bazzi, A. Zarrouk, S.S. Al-Deyab, B. Hammouti, L. Bazzi, **A.Chakir**. *Int. J. Electrochem. Sci.* 7 (2012) 3453 – 3465.

P9- Corrosion Inhibition of Steel in 1 M Hydrochloric Acid Medium by Chamomile Essential Oils. D. Ben Hmamou, R. Salghi, A. Zarrouk, B. Hammouti, S.S. Al-Deyab, Lh. Bazzi, H. Zarrok, **A. Chakir**, L. Bammou. *Int. J. Electrochem. Sci.* Sous press 2012. *Int. J. Electrochem. Sci.*, 7 (2012)2361 - 2373

P10- Electrooxidation of Bupirimate: A Comparative Study of SnO₂ and Boron Doped Diamond Anodes. M. Errami, R.Salghi , N. Abidi , L. Bazzi , B. Hammouti, **A. Chakir** , E. Roth , S. S. Al-Deyab *Int. J. Electrochem. Sci.*, 6 (2011) 4927 - 4938

P11- The heterogeneous photo-oxidation of difenoconazole in the atmosphere.

M. Al Rashidi, O. El Mouden, **A. Chakir**, E. Roth, R. Salghi. *Atmospheric Environment* 45, (2011) 5997-6003.

P12- Kinetic study of the peroxybenzoyl radical : Ultra-Violet spectrum, self-reaction and reaction with HO₂ kinetics.E. Roth, **A. Chakir** and A. Ferhati
J. Phys. Chem. A 2010, **114**, 10367–10379

P13- Kinetic of the reaction of a series of dimethylbenzaldehydes with Cl radicals at room temperature.

G. El Dib, **A. Chakir** and A .Mellouki.

Chemical Physics Letters, Vol455/4-6 pp 151-155 (2008)

P14- Disappearance of Chlorpyrifos Ethyl Pesticide Residues on Tomatoes, Citrus Fruits and Sugar Beet Grown in the Open Field. R. Salghi, H. Zrouali , M. Zougagh,, L. Bazzi, **A. Chakir** and A. Rios. *Arabian J. Chem. Vol. 1*, No. 3, 219-226 (2008)

P15-UV absorption Spectra of dimethylbenzaldehydes isomers

G. El Dib, **A. Chakir** and A .Mellouki

Journal of Physical Chemistry A, **112**, 8731-8736 (2008)

P16- In-House use pesticide residue monitoring of tomatoes from souss-Massa (MOROCCO) and Pesticide residue levels in tomatoes grown in a greenhouse after multiple applications of difocol and difenconazole.

O. Id El Mouden, A. Lemeryeratte, M. Zougagh, R. Salghi, L. Bazzi, **A. Chakir** and A. RÍOS1

Italian Journal of Food Science. n. 4, vol. 21 (2009)

P17- Pesticide residue monitoring in green beans from Souss-Massa (Morocco) and half times of dithiocarbamate fungicide on green beans after field treatment by Mancozeb and Mefenoxam.

L. Bazzi, M. Zougagh, R. Salghi, A. Hormatallah, A. Lemeryeratte and**A. Chakir**

Oriental Journal of Chemistry, Vol35 (3), 461-470 (2009)

P18- Electrochemical oxidation of methidathionorganophosphorous pesticide

F. Hachami, R. Salghi, M. Errami, L. Bazzi, A. Hormatallah, **A. Chakir** and B. Hammouti.

*Physical and Chemistry News*52 (2010) 107-111.