

CV Pierre Audebert

| Identité / Personal details | | | | | |
|--|-----------------------------|-----------------------------|--|---------------------------|----------------------|
| Genre / Gender (Femme / Homme / Autre) | | Homme/Male | | | |
| Nom et prénom / Name and first name: | | Audebert Pierre | | | |
| Pays / Country | | France | | | |
| Poste actuel / Current position ¹ | | | | | |
| Titre / Function | | | | | |
| Professor, Exc. Class. | | | | | |
| Organisme(s) public(s) français / French public organisation(s) | | | | | |
| Code RNSR / RNSR code | Organisme / Organisation | Laboratoire / Laboratory | Code unite / Unit code | Code postal / Postcode | Ville / Town |
| 199812859R | ENS Paris-Saclay | PPSM | UMR 8531 | 91190 | Gif s. Yvette |
| Autres activités / Other activities | | | | | |
| <i>Activités de direction, encadrement, enseignement, activité d'évaluation dans des commissions ou d'expertise scientifique / Executive board, supervision of student, teaching, memberships in panels or individual scientific reviewing activities</i> | | | | | |
| <p>Leader of two research teams, 1993-98, (U. Franche-Comté) and 1998-2016, (ENS Cachan) before reorganization of the PPSM laboratory into a single team. Now also officially senior researcher in XLIM Physics Institute, Limoges (official part-time position, upon mutual agreement, shared with the main position in ENS Paris-Saclay).</p> <p>Expert MESRI, Reviewer for numerous journals including ACS AMI, Angewandte, Nature Chemistry, etc and foreign grant programs (Poland, India, Austria ...) Expert of the Maestro program panel (Poland) Evaluator for numerous PhD's, habilitations and professor applications in France and Europe.</p> <p>Advisor or co-advisor of about 40 PhD students.</p> | | | | | |
| Postes antérieurs / Previous positions | | | | | |
| Début / Start date | Fin / End date | Ville / Town | Etablissement / Organisation | | Fonction / Function |
| May 88 | Sept. 93 | Paris | CNRS section 13/U. Paris 7 | | Chargé de recherches |
| Oct. 93 | Sept. 98 | Besançon | Université de Franche Comté | | Professor |
| Interruption(s) de carrière / Career interruption(s) | | | | | |
| No | | | | | |
| Formation supérieure / Education ² | | | | | |
| Engineer ESPCI Paris/PhD (these d'Etat) in University J. Fourier Grenoble (1987) + 6 months post-doc in CEA Grenoble. | | | | | |
| Productions scientifiques / Scientific productions | | | | | |
| Projets de recherche, prix, distinctions, bourses, etc. / Grants, prizes, awards, fellowships, etc. | | | | | |
| <p>Participation to numerous ANR projects (leader of project Nanoencre 2005-2008) Leader member of the European ITN Excilight Grant. Minor partner of the H 2020 Gotsolar project.</p> <p>Special invited professor positions abroad (Zhejiang prof., ECNU Shanghai 2006-11, World Class Univ. Prof. in SNU Seoul 2011, Tarrant Prof. U. Florida in 2009, Associate Prof. in Yonsei U., Seoul 2013) Numerous invited stays in Japan, Korea, US, Poland, Canada, China, etc... Honorary Member of the Polish Chemical Society (should have been special guest in national conf. 2020 for the occurrence, delayed to date unknown)</p> <p>IUF Junior member (1999-2004) and Senior member (2014-19).</p> <p>Author of 220+ research publications, 10 reviews and/or book chapters, one teaching book on electrochemistry, invited co-editor of a book: "Luminescence in electrochemistry".</p> | | | | | |
| 5 publications majeures / 5 most relevant publications | | | Quel est l'apport majeur de cette publication ? / What is the major contribution of this publication? | | |

¹ Compléter la ou les sections appropriées / Fill the appropriate field(s)

² Les non-titulaires d'un PhD indiquent la date de leur dernier diplôme académique. / Researchers without a PhD must indicate the date of their last academic degree.

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| 1 | G. CLAVIER and P. AUDEBERT "s-Tetrazines as building blocks for new functional molecules and molecular materials", <i>Chem. Rev.</i> , 2010 , 110, 3299. | This review is the very first on physico-chemical properties of tetrazines, and especially their fluorescence. It also provides along a report of the activity of our team on the fluorescence and electrofluorochromism of tetrazines |
| 2 | Three Invited Chapters in the series " <i>Progress in Heterocyclic Chemistry</i> (PHC) published by the International Society of Heterocyclic Chemistry (ISHC)" (J. Joule, G. Gribble Ed.) "Triazines, Tetrazines and Fused Rings Polyaza Systems" P. AUDEBERT, C. ALLAIN and G. CLAVIER. Editions 2016 , 2017 and 2018 | This series (directed by Pr J. Joule) is the most important annual record in heterocyclic chemistry. We were invited to write 3 years in a row this chapter, on high nitrogen content aromatic heterocycles, which is also a recognition of our contribution to the field. |
| 3 | Y. QU, F. X. SAUVAGE, G. CLAVIER, F. MIOMANDRE and P. AUDEBERT, <i>Angew. Chem. Int. Ed.</i> , 57, 2018 , 12057. | This article (with a patent linked) reports a very easy synthesis of clickable H-tetrazines, involving DCM as the provider of the C-H fragment. This unprecedented synthetic path is considerably cheaper than the concurrent one, which used nickel or scandium triflate. |
| 4 | Extending accessible heptazine chemistry; 2,5,8-tris(3,5-diethyl-pyrazolyl)-heptazine, a new highly soluble heptazine derivative with exchangeable groups, and examples of new derived heptazines with their physical chemistry. T. LE, C. ALLAIN, L. GALMICHE, R. GUILLLOT and P. AUDEBERT, <i>Chemical Science</i> , 10, 2019 , 5513 | This article (patent linked) describes the second to-date heptazine with leaving groups easily exchangeable through SNAr substitution. The synthesis of this compound, much easier to prepare than its sole concurrent, trichloroheptazine, is indeed a noticeable advance in synthetic heptazines chemistry. |
| 5 | P. AUDEBERT, E. KROKE, C. POSERN and S.-H. LEE, State of the Art in the Preparation and Properties of Molecular Monomeric s - Heptazines: Syntheses, Characteristics, and Functional Applications. <i>Chem. Rev.</i> 2021 , 121, 2515. | This review is the very first on heptazine molecules, at the exclusion of graphitic carbon nitrides and related polymers. It provides a report of the activity in synthetic chemistry, physical chemistry and derived materials on this emerging family, emphasizing Pr Kroke's, as well as ours, contributions. |

Valorisation

brevet, licence, création d'entreprise, développement de logiciel, base de données, prototype, etc. / patent, creation of a start-up, software development, database, prototype, etc.

(confidential title) C. ALLAIN, L. GALMICHE, C. PRETE and P. AUDEBERT, French Patent deposited on March 30th, 2012; It describes the direct fluorescent revelation of latent fingerprints, using a mixture of a tetrazine and a cyanoacrylate glue. Under exploitation since 2013, the product is used by most police forces in France (and partly abroad).

Two recent patents (N° 18 52111, deposited on 2018, march 12th, Synthèse de nouvelles heptazines, and N° 18 51715, deposited on 2018, feb. 27th, Procédé de Fabrication de Tétrazines), both approved in 2019, European extension following. Confidential content; Exploitation by a start-up company (IKAMBA) is still under discussion.