

Egle Beccalli obtained her degree in Pharmaceutical Chemistry and Technology in 1979 at the University of Milan. In 1983 she became researcher, in 1998 she was appointed associate professor of organic chemistry and in 2003 she became full professor of organic chemistry. She held the office of head of the DISMAB (Department of Molecular Sciences Applied to Bio-systems) at the University of Milan till the 2012, date of the department to come together with the DISFARM.

- The research field of prof. Egle Beccalli is the transition-metals catalyzed reactions and the heterocyclic organic chemistry. The researches are finalized to study the reactivity and to develop new synthetic methods for bioactive molecules and alkaloids and for the synthesis of polycyclic systems. The most studied heterocyclic systems are the isoxazole nucleus and the indole derivatives. The former is used for his high versatility in ring transformation to give different heterocyclic systems. The indole derivatives are used as a scaffold for active molecules, the applications of which range from antibacterial, antifouling, antiproliferative activities to dye-sensitizer for solar cells. Nowadays studies of green chemistry involving eco-friendly solvents, solvent-free reactions, microwaves promoted coupling reactions are in progress.

Publications:

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- 3) Beccalli, E.M. Borsini, E. Brenna, S. Galli, S. Rigamonti, M. Broggin, G. " σ -Alkylpalladium Intermediates in Intramolecular Heck Reactions: Isolation and Catalytic Activity" *Chemistry--A European Journal* **2010**, 1670.
- 4) Beccalli E.M., Broggin G., Martinelli, M., Sottocornola, S. "C-C, C-O, C-N Bond Formation on sp^2 -Carbon by Pd(II)-Catalyzed Reactions Involving Oxidant Agents" *Chem. Rev.* **2007**, 107, 5318.
- 5) Beccalli E.M., Broggin G., Martinelli, M., Masciocchi, N., Sottocornola, S. "New 4-spiroannulated tetrahydroisoquinolines by a one-pot sequential procedure. Isolation and characterization of σ -alkylpalladium Heck intermediates" *Org. Lett.* **2006**, 8, 4521.
- 6) Beccalli E.M., Broggin G., Paladino G., Zoni C. "Palladium-mediated approach to dibenzo[b,e][1,4]diazepines. An efficient synthesis of tarpane" *Tetrahedron* **2005**, 61, 61.
- 7) Beccalli E.M., Broggin G., Paladino G., Penoni A., Zoni C. "Regioselective Formation of Six- and Seven-Membered Ring by Intramolecular Pd-catalyzed Amination of N-allyl-nthranilamides" *J. Org. Chem.* **2004**, 69, 5627.