

化学講演会のお知らせ

2012年7月11日 (水)

午後4時30分より

F棟5階大会議室にて

Speaker:

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共生科学研究センターセミナー

KYOUSEI Science Center Seminar

Title: Amino Acids derived Bioactive Alkaloids and Designed Diversity: Total Synthesis and Bioevaluationers

Breast cancer, one of the most prevalent cancers among women these days, is known to be caused by estrogen exposure, however its shortage in the body further aggravate problems for postmenopausal women. Our objective of research is to develop target and diversity oriented synthesis (TOS and DOS) of amino acids derived small molecules capable of perturbing cell proliferation, possibly leading ultimately identification of therapeutic protein targets. We are searching to identify new ligands (molecules) which could mimic the actions of natural hormones, with minimal side effects. Alkaloids played a major role towards identification of new ligands. Discussion will be focussed on the following topics where amino acids derived alkaloids and seco or modified steroids may act as anticancer breast agents, possibly free from undesirable or harmful side effects.

- i Synthetic methodology for accessing amino acid derivatives.
- ii Diverse access to amino acid based chiral seco-steroidal architectures and their pharmacological evaluation.
- iii Approach for target synthesis of alkaloids; Balanol, Ophiocordin, Epiquinamide, Conhydrine using amino acids as chiral synthon.

References:

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3. Singh, R.; and Panda, G.; Org. Biomol. Chem., 2011, 9, 4782-4790. (cover page)
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5. Samanta, K., Chatterjee, B., Mishra, J. K., Dwivedi, S. D., Naik, L.V., Choudhry, P., Bid, H. K., Konwar, R., Chattopadhyay, N., and Panda, G.; Bioorganic & Medicinal Chemistry Letters, 2010, 20, 283-287.
6. Srivastava, A. K., and Panda, G.; Chemistry A European Journal, 2008, 14, 4675-4688.
7. Mishra, J. K., and Panda, G.; Journal of Combinatorial Chemistry; 2007, 9, 321-338.
8. Shagufta and Panda, G.; Organic Biomolecular Chemistry; 2007, 5, 360-366.

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