

# Special Issue for IEEE Transactions on NanoBioscience

**Title:** Molecular communications for interfacing and modeling living systems

## **CFP description:**

Molecular communication (MolCom) has established as one of the novel interdisciplinary research themes with strongest impact of the last five years. While most of the relevant research is devoted to investigate techniques to model and/or design artificial molecular communications systems, focusing on reliability, bit rate, range extensions, and so on, mimicking and inspiring to classic wireless communication paradigms, a lot of research MolCom can span in different and novel areas.

In particular, MolCom research offers new possibilities to model communications within living systems. For instance, they can be used to measure and model noise, information transfer rate, and interference between protein networks. In addition to modeling living systems, another almost unexplored research area consists of using MolCom to enable the establishment of a communication control interface between the living system itself and external technologies. For instance, MolCom can exploit epigenetic mechanisms as a control network, similarly to the regulation of gene expression, or it could control the activation/deactivation of biological monitoring agents within living systems.

Potential contributions are expected, but not limited to, in the areas of molecular communications for modeling and interfacing with living system. The 3rd Workshop on Molecular Communications (Ghent, 4th-6th April 2018, <https://www.molecularcommunications.eu>) addresses these interdisciplinary research areas, and submissions are solicited from the MolCom 2018 conference participants. Submissions are also solicited from other researchers in the areas for review or research papers for this special issue. Manuscripts will be subject to the normal peer review procedures of the IEEE Transactions on NanoBioscience.

Follow the guideline (<http://tnb.embs.org/forauthors.html>), and submit your paper to Manuscript Central at <http://mc.manuscriptcentral.com/tnb-embs>, indicating in the cover letter that you wish your paper to be considered for the Special Issue “Molecular communications for interfacing and modeling living system”.

**Submission deadline:** ~~May 31, 2018~~ July 15, 2018 (**EXTENDED**)

Please address all other correspondence regarding this special issue to the Guest Editors.

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