Ken Yamada

**Title:** Structuring Biosystems: Functions Emerging from Molecules

**Author(s):** Ken Yamada1, John Smith2, Taro Rokkasho3

**Affiliation(s):** 1 Rokkasho University, Japan, 2 Aomori Medical Institute, Japan, 3 Hachinohe Science Institute, Japan

**Abstract:** TEXT

---------------------------------------------------------------------------------------------------

**Format:**

Standard word processing format (.doc, .docx, .txt, .rtf)

**Language:**

English

**Font:**

10.5 size Helvetica or Arial

**Length:**

Approximately 300 words

**Presenter:**

Please indicate the presenting author's last name in the upper right hand corner of the document file

**Title:**

Capitalize the first letter of the title

**Author(s) and author affiliations:**

Author's name should be written in full and the presenting author's name should be underlined. Please add the country name after the affiliation. When you have co-author(s), please follow the example below:

Ken Yamada1, John Smith2, Taro Rokkasho3

1 Rokkasho University, Japan, 2 Aomori Medical Institute, Japan, 3 Hachinohe Science Institute, Japan

**Figures and photograph:**

Not allowed

**Other:**

Please include title, author(s), affiliation(s) information in the document

**Notice:**

Accepted abstracts will be printed in the abstract book, copies of which will be provided to all participants by downloadable file. The text will be reformed to fit the design of the abstract book.

Ken Yamada

sample

**Radioactivity and Radon Exhalation Rate in Common Tiles Used as Construction Materials in Japan**

Ken Yamada1, John Smith2, Taro Rokkasho3

1 Rokkasho University, Japan, 2 Aomori Medical Institute, Japan, 3 Hachinohe Science Institute, Japan

Some construction materials contain relatively high concentrations of natural radioactive nuclides (uranium and thorium series). In some cases, houses employing such construction materials have enhanced radiation and radioactivity levels. It is possible that air dose rate in indoor environment is enhanced and that radon exhaled from the natural radionuclides accumulates in indoor air. European Commission recommends principles for the purpose of protection against gamma rays emitted from construction materials. In the present study, construction materials (common tiles) were collected from a company. Concentrations of natural radioactive nuclides and radon exhalation rates were measured. Common tiles were also measured before and after baking. These parameters changed before and after the baking. In particular, radon exhalation rates were significantly reduced after baking. This could be because pore space existed in the materials was reduced by baking and the number of radon atoms emanated into the pore space was reduced.