

UTokyo Amgen Scholars Program 2022  
Host Laboratories & Project Topics

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| <b>Name of Faculty Member (Title)</b>  | MINAMI Tsuyoshi (Associate Professor)   |
| <b>Name of Graduate School / Faculty/ Institute</b>  | Institute of Industrial Science   |
| <b>Research Topic &amp; Research Description</b>   | <p>My group is interested in "applied" supramolecular chemistry. While previous work in the field of supramolecular chemistry centered mostly on fundamental research, current developments suggest that such chemistry is well poised to make significant contributions to various research fields. In particular, supramolecular sensors for biologically important species or pollutants are some of the most promising applications of molecular recognition materials. To be harnessed for rigorous analytical assignments, my research centers on the molecular design and synthesis of materials as well as the fabrication of devices.</p> <p>Recent research projects are as follows:<br/>           1) Chemical Sensors based on Organic Thin Film Transistors Functionalized with Molecular Recognition Materials<br/>           2) High-throughput Analysis based on Supramolecular Sensor Arrays</p> |
| <b>Special academic conditions required for research</b>                                   | <b>1) Prerequisite knowledge and/or specific skill and its proficiency</b>  |
|  | Organic synthesis, organic electronics and/or biochemical experiment  |
|  | <b>2) Required study field(s)</b>   |
|  | General chemistry (organic chemistry, biochemistry, analytical chemistry, etc.) and/or electronic engineering (transistor, diode, circuits, etc.)   |
| <b>3) Academic background or research project experience to be considered at selection</b> | <b>3) Academic background or research project experience to be considered at selection</b>  |
|  | Fundamental knowledge and experience in the above disciplines would be useful, but not required.  |
| <b>Lab Website</b>   | <a href="http://www.tminami.iis.u-tokyo.ac.jp/en/">http://www.tminami.iis.u-tokyo.ac.jp/en/</a>   |
| <b>Campus</b>  | Komaba II: <a href="https://www.iis.u-tokyo.ac.jp/en/access/">https://www.iis.u-tokyo.ac.jp/en/access/</a>  |
| <b>Academic Research Areas</b>   | Biochemistry<br>Biotechnology<br>Chemistry  |