

# CERTIFICATE of NOMINATION

## Best Application Paper Award

**Rigid-body rotation versus transverse bending wave swimming  
of magnetically-functionalized sperm cells**

**V. Magdanz<sup>a</sup>, A. Klingner<sup>b</sup>, L. Abelman<sup>c</sup>, I.S.M. Khalil<sup>c</sup>**

<sup>a</sup>IBEC, ES; <sup>b</sup>German Univ in Cairo<sup>b</sup>, EG; <sup>c</sup>Univ of Twente, NL



---

**Ashis Banerjee**  
Awards Chair



**Yu Sun**  
General Chair



**Sergej Fatikow**  
Founding Chair