

TI-FRIS/FRIS Symposium 2026: Poster Presentations (Life and Environments)

Day 1 & 2: February, 16 (Mon) - 17 (Tue), 2026

No.	Presenter	Affiliation	Title	(Title in Japanese)
1	Kyoko Chiba	FRIS, Tohoku Univ.	How neurons maintain their health.	
2	Yuta Kudo	FRIS, Tohoku Univ./TI-FRIS Fellow	Investigating the origin, biosynthesis, and ecological transfer of tetrodotoxin using artificial ecosystems.	人工生態系を用いたテトロドキシンの起源、生合成、伝播の研究
3	Madoka Ichikawa-Seki	Iwate Univ./TI-FRIS Fellow	Development of a novel in vitro culture system of liver flukes to eliminate bottlenecks in research on fasciolosis	肝蛭（かんてつ）症研究のボトルネック解消を目指した新規実験系の創出
4	Toshiharu Ichinose	FRIS, Tohoku Univ.	Ribosome dynamics in the nervous system	
5	Shinichi Sato	FRIS, Tohoku Univ.	Chemical Probe for Protein Aggregation	
6	Sho Kobayashi	Yamagata Univ./TI-FRIS Fellow	The role of xCT in selenium uptake when sodium selenite is a selenium source. — Is Bonite broth an effective selenium source? —	亜セレン酸ナトリウムをセレン源にする場合のxCTのセレン取り込みにおける役割 —鰹だし汁は有効なセレン源であるか—
7	Nahoko Kuga-Sasaki	FRIS, Tohoku Univ.	Neurophysiological mechanisms of stress regulation through brain-body interactions	脳末梢連関を介したストレス制御の神経メカニズム
8**	Naoki Fujita	Hirosaki Univ./TI-FRIS Fellow	New Developments in Health Science Leveraging Big Data	ビッグデータを活かした健康科学の新展開
9**	Ken Ikeuchi	FRIS, Tohoku Univ.	Cryo-EM 3D Structures of Eukaryotic Ribosomes in mRNA-to-protein Translation Regulation	リボソームの3次元構造
10**	Manabu Bessho-Uehara	FRIS, Tohoku Univ.	Secrets on the "Stealing Ability" for understanding the process of evolution of novelty	
11*	Hideaki Matsubayashi	FRIS, Tohoku Univ.	How do motile cells emerge? –A reductionist approach–	動く細胞はどのように生まれるのか —還元論的アプローチからの理解—
12***	Jiajie Wang	Tohoku Univ./HABATAKU	Chelating Agent-Assisted CO <sub>2</sub> Mineralization: Turning Emissions into Resources	
13***	Toru Hamamoto	Tohoku Univ./HABATAKU	Measurement methods for carbon storage compounds in soil microbes and elucidation of their storage characteristics	土壌微生物の炭素貯蔵化合物測定方法の開発とその蓄積特性の解明
14***	Shinichi Sato	Tohoku Univ./HABATAKU	Early Identification of Neonatal Sepsis: Peripheral Perfusion Index Using a Video Camera	新生児敗血症の早期発見に向けた挑戦：ビデオカメラを用いた末梢灌流指数の有用性
15***	Hiroyuki Igarashi	Tohoku Univ./HABATAKU	Neurotransmitter-Mediated Regulation of the Stress Response	神経伝達物質による脳内ストレス応答制御機構の解明
16***	Maki Hayashi	Tohoku Univ./HABATAKU	Investigation of cellular physical properties in Brassicaceae self-incompatibility combined with physical measurements.	物理学的計測との融合によるアブラナ科植物の自家不和合性における細胞物性制御の検証
17***	Hsing-Jung Ho	Tohoku Univ./HABATAKU	Efficiency Treatment and Recycling Technologies for Semiconductor Wastewater	半導体産業廃水を対象とした効率的処理・資源循環技術

\* Posters by Pls of FRIS's Program for Creative Interdisciplinary Collaboration Program in their 2nd year

\*\* Posters by TI-FRIS Fellows and FRIS Creative Interdiscip. Res. Div. members in their 2nd year

\*\*\* Poster Presentations by Awardees of Tohoku University's "HABATAKU Young Researchers Support Program"

\*\*\*\*Posters by FRIS Members from Endowed Research Divisions

TI-FRIS/FRIS Symposium 2026: Poster Presentations (Information and Systems)  
Day 1 & 2: February, 16 (Mon) - 17 (Tue), 2026

No.	Presenter	Affiliation	Title	(Title in Japanese)
18	Le Bin Ho	FRIS/TI-FRIS Fellow	An Ising model for strong Charge-Parity Problem	
19**	Hiroaki Hashida	FRIS, Tohoku Univ.	Wave-Domain Electromagnetic Field Control	波動領域における電磁波制御
20	Kotaro Yasui	FRIS, Tohoku Univ.	Exploring Design Principles for Life-like Locomotor Intelligence	
21****	Yusuke Hashimoto	FRIS, Tohoku Univ.	"A New Gateway to Materials Research Opened by AI and Robotics	

\* Posters by Pls of FRIS's Program for Creative Interdisciplinary Collaboration Program in their 2nd year  
\*\* Posters by TI-FRIS Fellows and FRIS Creative Interdiscip. Res. Div. members in their 2nd year  
\*\*\* Poster Presentations by Awardees of Tohoku University's "HABATAKU Young Researchers Support Program"  
\*\*\*\*Posters by FRIS Members from Endowed Research Divisions

**TI-FRIS/FRIS Symposium 2026: Poster Presentations (Device and Technology)**

**Day 1 & 2: February, 16 (Mon) - 17 (Tue), 2026**

No.	Presenter	Affiliation	Title	(Title in Japanese)
22	Chao Tang	FRIS, Tohoku Univ.	Ultrafast THz detection based on 2D heterostructure	二次元ヘテロ構造による超高速テラヘルツ検出
23**	Soichiro Tottori	Tohoku Univ./TI-FRIS Fellow	Iontronics for Computation and Medicine	
24	Yuta Yamane	FRIS/TI-FRIS Fellow	Magnetic–Electric Energy Conversion	磁気と電気のエネルギー変換
25	Guanghui Cheng	FRIS, Tohoku Univ.	Discovery of Moiré Magnetism	モアレ磁性の発見
26	Hiroya Abe	FRIS/TI-FRIS Fellow	Mussel-inspired Underwater Adhesives	ムール貝模倣水中接着剤
27**,***	Aakanksha Sud	FRIS, Tohoku Univ./ HABATAKU	Nonreciprocal Energy Flow Mediated by Chiral Magnon–Phonon Interactions in Synthetic Antiferromagnets	
28****	Motoya Shinozaki	Tohoku Univ./HABATAKU	Development of ultra-thin superconductor field-effect transistors	超伝導薄膜トランジスタの開発
29*	Takuro Ishii	Alumni FRIS, Tohoku Univ.	Four-Dimensional Visualization of Rodent Cerebral Vasculature Using High-Frequency Ultrasound	

\* Posters by Pls of FRIS's Program for Creative Interdisciplinary Collaboration Program in their 2nd year

\*\* Posters by TI-FRIS Fellows and FRIS Creative Interdiscip. Res. Div. members in their 2nd year

\*\*\* Poster Presentations by Awardees of Tohoku University's "HABATAKU Young Researchers Support Program"

\*\*\*\*Posters by FRIS Members from Endowed Research Divisions

TI-FRIS/FRIS Symposium 2026: Poster Presentations (Human and Society)

Day 1 & 2: February, 16 (Mon) - 17 (Tue), 2026

No.	Presenter	Affiliation	Title	(Title in Japanese)
30**	Ai Suzuki	Fukushima Univ./TI-FRIS Fellow	Applying Behavioral Science to Crime Prevention in Fukushima Prefecture: Initiatives and Communication Strategies	
31**	Xiang dan PIAO	Iwate Univ./TI-FRIS Fellow	Human Capital and Pro-environmental Behavior for sustainability	
32**	Yumi Hamamoto	FRIS, Tohoku Univ.	Reconceptualizing body image disturbance as a framework of self-body perception using virtual reality	
33*	Izumi Matsudaira	FRIS, Tohoku Univ.	Brain Similarity in Marital Couples	
34	Yuki Takahashi	Fukushima Univ./TI-FRIS Fellow	Security and safety among those working in prison or probation services	犯罪者処遇に関わる人の安全性確保に関する課題
35	Kaoru Kakinuma	FRIS, Tohoku Univ.	Global Assessment of Child Nutrition Risk Under Drought: Focusing on Ecosystem Responses	干ばつに伴う子どもの栄養リスクの全球評価：生態系応答に着目して
36	Yasuhiro Mitarai	Miyagi Univ. of Education/ Senior TI-FRIS Fellow	Rhetoric Emerging Through Voice in Waka	声と和歌のレトリック
37***	Yusuke Hiraga	Tohoku Univ./HABATAKU	Impacts of Climate Change on Tropical Cyclones and Associated Rainfall over South Korea: Storyline and Risk-based Approaches	気候変動がスーパー台風とその降雨にもたらす影響：ストーリーラインとリスクベース評価手法
38	Yuta Nakayasu	FRIS, Tohoku Univ.	Toward the Development of Nature-Positive Materials Engineering	ネイチャーポジティブ材料工学の開拓に向けて
39	Shogo Nishiyama	Miyagi Univ. of Education/ Alumni TI-FRIS Fellow	Perception of Gender Difference in various subjects: University and Secondary School Students	中学生と大学生の男女の各教科における能力の認識

\* Posters by Pls of FRIS's Program for Creative Interdisciplinary Collaboration Program in their 2nd year

\*\* Posters by TI-FRIS Fellows and FRIS Creative Interdiscip. Res. Div. members in their 2nd year

\*\*\* Poster Presentations by Awardees of Tohoku University's "HABATAKU Young Researchers Support Program"

\*\*\*\*Posters by FRIS Members from Endowed Research Divisions

TI-FRIS/FRIS Symposium 2026: Poster Presentations (Advanced Basic Science)

Day 1 & 2: February, 16 (Mon) - 17 (Tue), 2026

No.	Presenter	Affiliation	Title	(Title in Japanese)
40a	Masaki Okumura	FRIS, Tohoku Univ.	New compartment in the endoplasmic reticulum	
40b****	Masaki Okumura	FRIS, Tohoku Univ.	A new approach to cosmetics development	化粧品開発のための学際アプローチ
41	Tomoki Tateishi	FRIS, Tohoku Univ.	Outside-the-cage synthetic approach to connectivity-controlled polymer networks	
42	Shigeo Kimura	FRIS/TI-FRIS Fellow	Stellar-mass Black Holes as Potential PeVatrons	
43**	Shingo Kanemura	FRIS, Tohoku Univ.	Elucidating Redox Enzyme-Mediated Mechanisms of Infection Control	
44**	Sho Fujibahashi	FRIS, Tohoku Univ.	Astrophysical phenomena related to productions of elements	
45	Hakuto Suzuki	FRIS, Tohoku Univ.	Circular dichroism in resonant inelastic x-ray scattering: Probing altermagnetic domains in MnTe	
46	Kohei Ichikawa	FRIS, Tohoku Univ.	Finding supermassive black holes through multi-wavelength observations	多波長観測を活かした超巨大ブラックホール探査
47	Aseel Marahleh	FRIS, Tohoku Univ.	Beyond transcription: uncovering modulators of skeletal health	
48	Naoya Kitajima	FRIS, Tohoku Univ.	Dark matter in superconductor	超伝導体における暗黒物質の物理
49	Atsushi Tahara	FRIS, Tohoku Univ.	Polycondensation of Biomass Compound with a series of benzenedithiols and their properties	バイオマス由来化合物を用いたキラルポリマーの開発および旋光性の制御

\* Posters by Pls of FRIS's Program for Creative Interdisciplinary Collaboration Program in their 2nd year

\*\* Posters by TI-FRIS Fellows and FRIS Creative Interdiscip. Res. Div. members in their 2nd year

\*\*\* Poster Presentations by Awardees of Tohoku University's "HABATAKU Young Researchers Support Program"

\*\*\*\*Posters by FRIS Members from Endowed Research Divisions

TI-FRIS/FRIS Symposium 2026: Poster Presentations (Materials and Energy)

Day 1 & 2: February, 16 (Mon) - 17 (Tue), 2026

No.	Presenter	Affiliation	Title	(Title in Japanese)
50	Yuji Saito	FRIS, Tohoku Univ.	Space Propulsion Interdisciplinary Integrated Research	宇宙推進学際統合研究
51	Taichi Goto	RIEC, Tohoku Univ./TI-FRIS Fellow TI-FRIS Fellow	Fabrication of Magneto-Optical Iron Garnet Films and Their Applications to Photonic and Spin-Wave Devices	磁気光学鉄ガーネット薄膜の作製とフォトニック・スピン波デバイスへの応用
52**	Sheng XU	FRIS, Tohoku Univ.	A Titanium-based crypgenic superelastic alloy	極低温対応型チタン系超弾性合金
53*	Welling, Thomas Arnoldus Josephu	FRIS, Tohoku Univ.	Silica-supported spherical colloidal crystals with tunable surface-modification to control charge and optical properties	
54	Naoki Kawano	Akita Univ./TI-FRIS Fellow	NIR emitting materials for radiation measurements	放射線計測のための近赤外発光材料
55***	Kumpei Tsuji	Tohoku Univ./HABATAKU	A Particle-Based Coupled Analysis Framework for Multiphysics Disaster Simulation	自然災害シミュレーションに向けた粒子法による多物理連成解析
56***	Yizhou Zhang	Tohoku Univ./HABATAKU	Soybean Oil Derived Gyroid Nanostructured Membranes	

\* Posters by Pls of FRIS's Program for Creative Interdisciplinary Collaboration Program in their 2nd year

\*\* Posters by TI-FRIS Fellows and FRIS Creative Interdiscip. Res. Div. members in their 2nd year

\*\*\* Poster Presentations by Awardees of Tohoku University's "HABATAKU Young Researchers Support Program"

\*\*\*\*Posters by FRIS Members from Endowed Research Divisions