

2018 CAMBRIDGE UK-JAPAN YOUNG SCIENTIST WORKSHOP

PRESENTATIONS

Friday 27th July, 2018 The Kaetsu Centre, Cambridge

This past week, students from schools in Britain and in Japan have been working together in small UK-Japan teams with a wide range of University of Cambridge scientists and engineers in explorations which have challenged them to work as teams and to think for themselves. We are also pleased to welcome again Professor Geraldine Thomas from Imperial College to lead the "Energy Generation-Risks and Benefits" project. In "toe-dipping" the world of cutting edge research and application, the students have not only put school knowledge to real life use, but also, by working together, have come to see themselves and their futures in a new global context and to form new international bonds of friendship. Today we learn something of their achievements. Time constraints mean that each team can only give the briefest account of all they accomplished together in just a few days.

The 2018 UK-Japan Young Scientist Workshop programme, which includes both this Workshop and a similar Workshop hosted at Tohoku University in Japan, has been supported by grants and charitable donations from Barclays Bank, The Great Britain Sasakawa Foundation, Mitsubishi Electric Europe, Toshiba Research Europe and The Japan Women's Association in Great Britain, and in Japan by the Japan Science and Technology Agency. We particularly thank the scientists & engineers of the University of Cambridge and Imperial College for all they have done to make this Workshop such a success; and also thank the Rikkyo School in England and the Kaetsu Centre for their invaluable support and organisation.

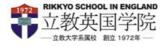














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PROGRAMME

13.00 WELCOME

Dr Eric Albone Clifton Scientific Trust

Mr Shuichi Akamatsu Minister for Economy, Embassy of Japan

13.15 Hydrogel Platform for Loading and Release of Cargo

University of Cambridge, Department of Chemistry; Prof Oren Scherman's group

Science Leaders Dr Marlous Kamp, Dr Shuntaro Amari

Facilitator: Ms Yukiko Fujii

Eddie Wilkinson County Upper School, Bury St Edmunds

Haruka Nasu Kyoto Prefectural Rakuhoku Senior High School **Lucy McKay** Newham Collegiate Sixth Form Centre, East Ham

Sara Moroki Kyoto Seibogakuin Senior High School

13.35 Bacterial Phenotypes in the Local Environment

University of Cambridge, Department of Biochemistry and CRUK Cambridge Centre

Cellular & Molecular Biology Programme

Science Leaders Dr Rhys Grant, Dr Rita Monson, Dr Siolian Ball

Facilitator Mr Ga Kitada

Ben Kelly St Mary Redcliffe & Temple School, Bristol

Samrah Saddiqi City of London School for Girls

Nicole Tung
Lian Yanagida
Ayaka Ujita

Wycombe Abbey School
Rikkyo School in England
Kyoto University ELCAS

Kyohei Tsuji Kyoto University of Education attached SHS

13.55 Aerodynamics in Jet Engines

The Whittle Laboratory. University of Cambridge Department of Engineering Engineering Leaders Dr Sam Grimshaw, Dr Chris Clark, Ms Heather Jameson, Mr Victor Sun, Mr Phoenix Tse

Facilitators Mr Ryo Mizuta, Mr Yuta Tsuchiya, Dr Emi Maruo

Angela Ng Wycombe Abbey School

Daichi HorieRitsumeikan Uji Senior High SchoolFinn DevlinThomas Hardye School, DorchesterMahir SaciidDigitech Studio School, Bristol

Nadia Vryoni-Dickson
Reiko Hatta
St Mary Redcliffe & Temple School, Bristol
Ritsumeikan Moriyama Senior High School

Reona Katayama Ritsumeikan Uji Senior High School

Shahir Ali Newham Collegiate Sixth Form Centre, East Ham

Taiki MuranoKyoto University ELCASTamami HiraiKyoto University ELCASTharanjaraa SivarupanCity of London School for GirlsToshiki NakamuraRikkyo School in England

14.25 REFRESHMENT BREAK

14.55 Earth Science- Climate Signal in Coastal Clays

University of Cambridge Department of Earth Sciences Science Leaders Mr Simon Crowhurst, Dr Maryline Vautravers Facilitator Mr Adam Roberts-Taira

Fynn Cunningham County Upper School, Bury St Edmunds **Mary Taylor** Thomas Hardye School, Dorchester

Muhsina Abdulhaq Newham Collegiate Sixth Form Centre, East Ham

Yudai Kusano Rikkyo School in England Ritsumeikan Moriyama SHS Yuta Kangawa Kyoto University ELCAS

15.15 Radiation All Around Us

University of Cambridge Department of Earth Sciences, Dr Ian Farnan's group Science Leaders Mr Giles Rought Whitta and Mr Peter Thomas Facilitator Mr Andrew Fox

Iori SugimotoKyoto University of Education attached SHSJigyasa MadanNewham Collegiate Sixth Form Centre, East Ham

Lewis Wild Digitech Studio School, Bristol

Misuzu Hamada Kyoto University of Education attached SHS

Oluwatosin Alatise City of London School for Girls

Rie Takeuchi Ritsumeikan Moriyama Senior High School

15.35 Energy – Risks and Benefits

Science Leader Prof Geraldine Thomas (Imperial College)

Facilitators Ms Anna Melkina, Mr Yuki Taira

Alex Shingleton County Upper School, Bury St Edmunds

Ayaka Ogasawara Kyoto Prefectural Rokuhoku Senior High School Ben Dzieniszewski St Mary Redcliffe & Temple School, Bristol

Kelly Cheng Wycombe Abbey School

Mayuko Tagawa Ritsumeikan Moriyana Senior High School Moeka Oki Kyoto Prefectural Rakuhoku Senior High School

Olivia Pearson Thomas Hardye School, Dorchester

Yuka Horiguchi Kyoto University of Education attached SHS

15.55 Science Communication- Workshop Podcast

Science Leaders Ms Izzie Clarke, Mr Adam Murphy (The Naked Scientist Team) Facilitators Ms Sayaka Fujita, Ms Kimie Roberts-Taira

Frankie Roger St Mary Redcliffe & Temple School, Bristol

Georgy Ivakhnenko Thomas Hardye School, Dorchester

Kohsuke Yoshikawa Kyoto Prefectural Rakuhoku Senior High School

More Hatanaka Kyoto Seibogakuin Senior High School

Nagi Tateno Comberton Village College Rohan Dewan Digitech Studio School, Bristol

Taichi Yoshida University of Nagoya School of Education

Affiliated Junior & Senior High School

Wataru Osada University of Nagoya School of Education

Affiliated Junior & Senior High School

16.25 COMMENTARY

Mr Brendan Griggs, Chief Executive, Great Britain Sasakawa Foundation **Prof Alexander Boksenberg, FRS**, Emeritus Professor of Experimental Astronomy and formerly Director, Royal Greenwich Observatory

CLOSING REMARKS

Iori Sugimoto Kyoto University of Education attached SHS Mr Nobiaki Ujita Kyoto Seibogakuin Senior High School

Samrah Siddiqi, Oluwatosin Alatise,Tharanjaa Sivarupan

City of London School for Girls

Mrs Mary-Grace Browning Clifton Scientific Trust Dr Eric Albone Clifton Scientific Trust

WORKSHOP DINNER

18.30 Coaches to Christ's College

Huntingdon Road outside the Kaetsu Centre

18.55 Reception Christ's College Fellows Garden for 19.35 Dinner in Hall

WELCOME & GRACE

Mr Ryo Mizuta Graduate Student, Christ's College &

Cambridge University Faculty of Engineering

AFTER DINNER SPEECHES

Dr Eric Albone, Mr Kentaro KisoClifton Scientific Trust
President, Barclays Japan

Sara Moroki & More Hatanaka Kyoto Seibo Gakuin

Mr Shigenobu Nakano Kyoto Prefectural Rakuhoku SHS

Eddie Wilkinson& Olivia Pearson
County Upper School, Bury St Edmunds
Thomas Hardye School, Dorchester

Mr Patrick Youmans St Mary Redcliffe and Temple School, Bristol

CERTIFICATES presented by Professor Geraldine Thomas

Imperial College