

1. Names, email addresses, and Member numbers of elected Officers.

Zhang, Tingting ( <a href="mailto:zhangt16@aston.ac.uk">zhangt16@aston.ac.uk</a> ):	President
Al-khateeb, Mohammad ( <a href="mailto:alkhamaz@aston.ac.uk">alkhamaz@aston.ac.uk</a> ):	Vice president
Ali, Abdallah ( <a href="mailto:aliaai@aston.ac.uk">aliaai@aston.ac.uk</a> ):	Treasurer
Kamalian Kopae, Morteza ( <a href="mailto:kamaliam@aston.ac.uk">kamaliam@aston.ac.uk</a> ):	Secretary

2. List of current Student Chapter Members:

Member Name	Email Address	Expires
Abdallah Ali	<a href="mailto:aliaai@aston.ac.uk">aliaai@aston.ac.uk</a>	7 December 2017
Mohammad Al-Khateeb	<a href="mailto:alkhamaz@aston.ac.uk">alkhamaz@aston.ac.uk</a>	1 June 2018
Md Asif Iqbal	<a href="mailto:iqbalm7@aston.ac.uk">iqbalm7@aston.ac.uk</a>	4 June 2018
Morteza Kamalian Kopae	<a href="mailto:kamaliam@aston.ac.uk">kamaliam@aston.ac.uk</a>	21 April 2018
Hani Khashi	<a href="mailto:kbashihi@aston.ac.uk">kbashihi@aston.ac.uk</a>	21 June 2018
Yang Lu	<a href="mailto:luy12@aston.ac.uk">luy12@aston.ac.uk</a>	4 October 2018
Auro Perego	<a href="mailto:peregoa@aston.ac.uk">peregoa@aston.ac.uk</a>	1 October 2018
Steffan Walters	<a href="mailto:walters2@aston.ac.uk">walters2@aston.ac.uk</a>	23 May 2018
Guoqing Wang	<a href="mailto:gw256@kent.ac.uk">gw256@kent.ac.uk</a>	15 November 2017
Changle Wang	<a href="mailto:wangc15@aston.ac.uk">wangc15@aston.ac.uk</a>	28 August 2018
Tingting Zhang	<a href="mailto:zhangt16@aston.ac.uk">zhangt16@aston.ac.uk</a>	1 June 2018

3. Details of Chapter activities since last report.

**3.1 Professional Development Event**

In 16<sup>th</sup> September 2016, a whole day event of the 25<sup>th</sup> year anniversary of AIPT (Aston Institute of Photonic Technologies) was held. Nine technical talks were given at this event by different former AIPT members. This big event was launched by our institute, most of chapter members have been involved in this event, from the event planning, reception, organising and so on. The attendees were over 120 that day.



In November 29th 2016, Dr. John Travers from the Heriot-Watt University was invited to give a seminar titled by “Nonlinear optics with gas-filled fibres”.

### 3.2 Outreach:

In November 1st 2016, Mini-Lightfest workshops was organised for year 6 school children (10-11 years old, 96 of them) from Anderton Park School at our institute. They were divided into 3 groups to participate 3 different programs, and they were the Programming Lego Mindstorms Robots with NXT software, how thick is your hair, make a blinking card. This workshop lasted about three hours.

### Financial breakdown

No funds were availed during this session by the chapter.

#### 4. Details of planned activities for the future.

##### 4.1 travelling lecturer program

Lecturer Name: Radan Slavik  
 Title: Ultralow thermal sensitivity of phase and propagation delay in Hollow-Core Fibers  
 Time: 11-12am, 21 August, 2017  
 Place: NW708, Aston University  
 Main content:

Propagation time through standard optical fibres changes with temperature at a rate of 40 ps/km/K. Although this is a value significantly better than that of metallic cables, it is detrimental in many applications including interferometry and sensing. Dr. Radan Slavik will introduce a smart hollow core fibre design so that the temperature sensitivity can be reduced to 2ps/km/K.

## 4.2 AiPT workshop “New Frontiers and Challenges in Optical Communications”

Location: MB161, Aston University

Date: 13th October, 2017

Sponsored by Aston Institute of Photonics Technology (AiPT), and Aston University OSA/SPIE Student Chapter, this workshop will be hosted at MB161, Aston University on 13th October, 2017. The workshop will invite professionals from industry and academy to introduce cutting-edge achievements as well as existed challenges in high-capacity optical links and secure quantum communication systems. The preliminary programme of the workshop is shown following:

09:00 – 09:30      Registration and welcome coffee  
09:30 – 09:40      Introduction (Prof. Sergei K. Turitsyn)  
09:40 – 10:30      Dr. Charles Laperle (Ciena Corporation, Canada): High Bit Rate Optical Links in Commercial Applications, Principles and Challenges for Next Generation Systems beyond 100 Gb/s  
10:30 – 11:20      Dr. Benn Thomsen (Microsoft, Cambridge): Optics in the cloud: opportunities for light.  
11:20 – 11:40      Coffee break  
11:40 – 12:30      Dr. Zhiliang Yuan (Toshiba Research Europe Limited, Cambridge): Quantum key distribution for fibre networks.  
12:30 – 14:00      Lunch break (G8)  
14:00 – 14:35      Dr. Milos Nedeljkovic, (ORC, University of Southampton): Silicon photonics and its prospects for data communications  
14:35 – 15:10      Dr. Son Thai Le (Nokia Bell Labs, Germany): Single side band communication direct detection for short reach and metro transmissions.  
15:10 – 15:45      Dr. Filipe Ferreira (Aston University): On the Feasibility of Mode-Division Multiplexed Transmission over Few-Mode Fibres  
15:45 – 15:50      closing remarks

This workshop is open to all people who are interested in optical communications, and we expect around 50 people from both internal and external will attend this workshop. As we include two coffee breaks and one lunch break during the workshop, the total expense would be around £1000. Since our chapter has only 11 members, we want to apply for financial support of \$500 from SPIE. The other expense we would like to ask help from our institute.