IMAPS-UK Educational Workshop

Understanding Plasma Processes in Microelectronics Applications

Half Day Workshop

Wednesday the 3rd of April 2019 - Granta Centre, Granta Park, Great Abington, Cambridge, CB21 6AL

Highlights:

- *Gain an understanding in the fundamental principles of plasma technology.*
- *Learn about plasma applications and the manufacturing environment.*
- *Opportunity to ask an expert.*
- *Excellent networking opportunities.*
- *Challenge your mind to consider*

As a lead into MicroTech 2019, John Maguire of Nordson March, will be presenting a half-day workshop on the topic: Understanding Plasma Process in Microelectronics Applications.

Gas plasma processes have long been used in the microelectronics industry for a variety of applications. For many, plasma is something of a "black box". This workshop attempts to explain what plasma is, which parameters one must consider when setting up a process and how to introduce plasma into the manufacturing environment. Moreover, it will illustrate a variety of applications and encourage us to start thinking about some new ones.

IMAPS-UK Workshops – Your Chance to Learn:

IMAPS-UK workshops offer delegates the opportunity to learn about the issues and complexities of microelectronics assembly technologies. They provide professional development through in-depth, real-life insights into materials, processes and equipment applied to current and future electronics.

Recent IMAPS-UK workshops have sold out rapidly and early booking is advised to avoid disappointment

Registration:

http://www.imaps.org.uk

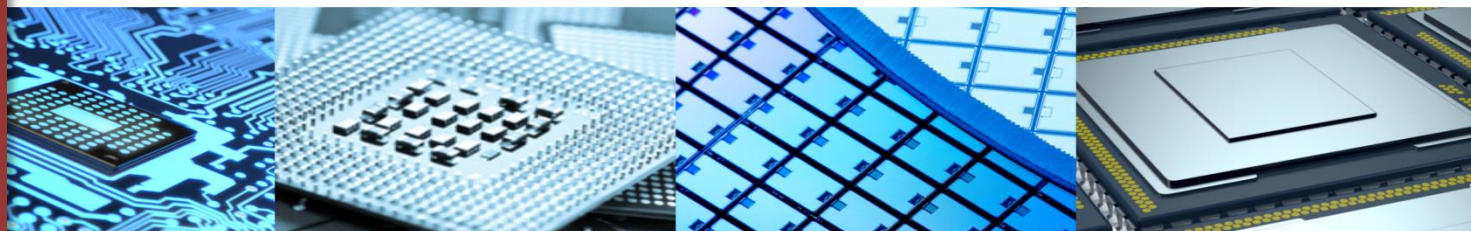
	Delegates
IMAPS Members	***£90***
Non member	***£120***

Prices - £ exclude VAT, inclusive of lunch & refreshments

"Where the Industry Meets"

Workshop Venue:

Granta Centre
Granta Park
Great Abington
Cambridge
CB21 6AL



Provisional Workshop Agenda:

12.00: Registration and buffet lunch

13:00 Introduction & Welcome

1. Who is Nordson March?
2. What is Plasma?
3. Plasma Processing Fundamentals I
4. Plasma Processing Fundamentals II
5. Plasma Modes

Coffee Break

6. Applications in Microelectronics and Electronics Assembly.
    a. Die attach
    b. Wirebonding
    c. Adhesive joining
    d. Potting and encapsulation
    e. Modifying surface properties
    f. Cleaning for ultimate cleanliness
    g. Conformal coating
    h. Plasma deposition
7. What Does Plasma Do to a Surface and How Can I Measure the Effect of Plasma
8. Time Dependency of the Plasma Effect
9. Sensitive Devices, ESD and Similar Questions
10. Plasma in Production.

17:00 - Wrap up and closing remarks

Registration

Registration via the event webpage on the IMAPS-UK website: www.imaps.org.uk

For further details, please contact IMAPS-UK

Workshop Venue:

Granta Centre
Granta Park
Great Abington
Cambridge
CB21 6AL

Understanding Plasma Processes in Microelectronics Applications.

More than eighty percent of the Universe is believed to consist of plasma; so say the scientists. Many of us however would be hard pushed to explain what a plasma is. Plasmas, nonetheless, are all around us: in lightning flashes, candle flames, fluorescent lights and in many of the tools we use today to manufacture the electronic goods that give shape to our daily lives.

This workshop will start right at the beginning, explaining in simple and understandable terms what a plasma is. It will make it clear that plasma is a process that operates only on surfaces – cleaning them, making them more or less easy to wet or to bond to, modifying the surface chemistry in many ways.

For those already using plasma or interested in introducing a plasma process it will cover one by one the many parameters available to a process engineer enabling him to tailor the plasma process to a given application. Using real examples taken from the microelectronics and electronics industries the wide range of applications for which plasma is currently used will be illustrated. Some pointers for the future will also be suggested. Applications will include: plasma before die attach, plasma before wirebonding, plasma before moulding, plasma before potting and encapsulation, cleaning for optical applications, adhesive bond enhancement, plasma prior to conformal coating and plasma deposition.

Some key considerations for the manufacturing engineer will also be discussed: batch or in-line processing, uniformity of treatment, sensitivity of components to the plasma environment, measuring the effect of plasma for quality control, fitting a plasma process into a modern manufacturing environment with MES/ERP and Industry 4.0. Its many different applications make plasma processing an ideal subject for an interactive workshop and there will be plenty of opportunity for questions and discussion.

JOIN TODAY AND START SEEING THE BENEFITS!
telephone us 0131 202 9004 email us office@imaps.org.uk visit us www.imaps.org.uk