



SINGAPORE CONFERENCE

11 March 2010 Thursday, 9am to 5pm

Keppel Club
(Keppel Hall, Level 3)
10 Bukit Chermin Road
Singapore 109918



Organised by: **IDEMA**

CONFERENCE AGENDA

THEME: Data Storage – Back to the Future

8.30am to 9.00am **Registration**

9.00am to 9.10am **Opening Address**
S.C. Lee – Chairman, IDEMA Singapore / Malaysia Committee

Session 1 – Market Analysis: Challenges and Opportunities

9.10am to 9.30am **Mark Geenen**
Founder & President, TRENDFOCUS
Topic and Synopsis– TBA

9.30am to 9.50am **John Rydning**
Research Director – Hard Disk Drives, IDC

“Back to the Future – Which One?”

The HDD industry is resilient in large part due to its ability to make technology advances in a timely manner to capitalize on the growing demand for digital storage. History can foretell the future, but one must also recognize the impact of current dynamics and analyze the future against potential crossroads. In this session IDC will compare historical technology and capacity trends with a potentially different future that may lie ahead.

9.50am to 10.10am **Thomas M. Coughlin**
President, Coughlin Associates

“Why Do Users Choose Different Storage Devices - The Future of Storage Tiers”

What do users look for in storage devices used in different applications? When do storage devices compete for an application and when do they provide a better user experience and price when used together? This talk will address the characteristics of storage devices and how they match applications and use real-life examples (consumer and enterprise) to show how storage devices can support each other as well as compete for an application. The modern storage hierarchy has never been as complicated as it is today and with new storage choices and more demand than ever for access to digital content in more places and more frequently, it is liable to get even more complicated. Find out about these new storage applications and elements of the modern digital storage hierarchy and how they are driving the overall growth of digital storage.

10.10am to 10.40am **Coffee Break, Browse Exhibits Display and Networking**



SINGAPORE CONFERENCE

11 March 2010 Thursday, 9am to 5pm

Keppel Club
(Keppel Hall, Level 3)
10 Bukit Chermin Road
Singapore 109918



Organised by: **IDEMA**

CONFERENCE AGENDA

THEME: Data Storage – Back to the Future

10.40am to 11.00am **Matt Bryson**
Senior Research Analyst – Storage, Avian Securities

“Conditions Green, HDD Stocks Red - Why a Severe Decline in Valuation Immediately Followed One of the Decade’s Most Profitable Quarters.”

Seagate, Hitachi, and Western Digital all posted significant increases in profit Q/Q as did suppliers Hutchinson, LSI. Equipment vendors Xyratex and Intevac both posted significant order gains. All of these companies provided rosy sales projections. However, following earnings, all of the above have declined significantly. In this presentation we attempt to explain the investor angst that has fueled the stock’s decline and whether this caution is an overreaction or a merited correction.

11.00am to 11.20am **Peter Hahn & K.C. Ee**
Senior Director of Advanced Design, Senior Design Engineer
Magnecomp Precision Technology PCL

“Designing Suspension Gimbal for Hygroscopic Performance Improvement.”

Nowadays, advances in technology and manufacturing process have enabled the increase of storage capacity. On the other hand, it has created new challenges. In particular, the stability of the static attitude under different temperature and humidity conditions has become more critical for suspension design.

In this work, the effects of hygroscopic expansion on pitch static attitude (PSA) have been studied through finite element model as well as experimental approach. Some gimbal design features aimed to reduce the sensitivity of PSA response to humidity change have been explored. Experimental study has also showed that the material property improvement and various design approaches can reduce the PSA response to humidity change.

11.20am to 12.00pm **Panel Discussion and Q&A**

12.00pm to 2.00pm **Lunch, Browse Exhibits Display and Networking**



SINGAPORE CONFERENCE

11 March 2010 Thursday, 9am to 5pm

Keppel Club
(Keppel Hall, Level 3)
10 Bukit Chermin Road
Singapore 109918



Organised by: **IDEMA**

CONFERENCE AGENDA

THEME: Data Storage – Back to the Future

Session 2 – Advanced Storages Technologies

2.00pm to 2.20pm

John Monroe
Research Vice President, Storage Markets
Technology and Service Provider Research, Gartner

“The Only Thing New Under the Sun is the History You Don’t Know About... - The past may be prologue or history may be bunk – a new look at old perspectives.”

The fourth quarter of 2008 was an unmitigated disaster for many industries, and the HDD industry was no exception. But the shocks of 4Q08 have engendered vastly improved executive strategies and the results, to date, have been astonishingly good, with an unprecedentedly prolonged period of strictly balanced supply, demand and price stability from 1Q09 through 4Q09, creating market conditions which enabled blended gross margins to grow to record levels at more than 25% for at least two major HDD suppliers. Can this lucrative state of affairs endure? If not, why not?

2.20pm to 2.40pm

Ryan Schmidt
Vice President of Product Engineering, IntriPlex Technologies Inc.

“Optimization of Pivot to Actuator Attachment Using Interference Bands.”

Synopsis– TBA

2.40pm to 3.00pm

Dean Dawson
Senior Director, Product Management, Atomic Force Microscopy Products
Veeco Instruments Inc

“New Atomic Force Microscopy Metrology Techniques for Next Generation Data Storage Features.”

Increasing areal density for the HDD industry requires the implementation of new technologies and designs in both head and media. Dimensional metrology is a key requirement to enable effective process development and subsequently in-line process monitoring. This paper introduces brand new AFM scan techniques for high resolution, and accurate dimensional measurement of both media and slider level features along with some measurement examples.



SINGAPORE CONFERENCE

11 March 2010 Thursday, 9am to 5pm

Keppel Club
(Keppel Hall, Level 3)
10 Bukit Chermin Road
Singapore 109918



Organised by: **IDEMA**

CONFERENCE AGENDA

THEME: Data Storage – Back to the Future

3.00pm to 3.30pm **Coffee Break, Browse Exhibits Display and Networking**

3.30pm to 3.50pm **Lee Soon Swee
Senior Scientific & Laboratory Services (SLS) Manager
Pall (Malaysia) Sdn. Bhd.**

“Sub50nm Filtration for Hard Disk Processing.”

Filtration is widely employed in data storage substrate and media processing steps and is essential in helping achieve clean surfaces free from particles and contamination. As processes continue to evolve to improve product yields and throughput, increase areal recording densities, decrease glide height and form factors, reduce defects; so is the desire for finer filtration. To support these objectives, sub 50nm asymmetric membrane type filters with minimal flow resistance are developed for fine filtration use in areas such as cleaning, etching and plating. Aspects of the asymmetric membrane design, technical performance and validation data will be presented and discussed.

3.50pm to 4.10pm **Dr. Young-Kook (Ryan) Yoo
Director of Global Sales and Marketing, Park Systems Corp.**

“Automated Defect Review AFM for Hard Disk Media and Substrates.”

Atomic Force Microscopy (AFM) is emerging as an essential tool in hard drive industry. Partnering with leading hard drive manufacturers, We also developed automatic defect review AFM that automatically locates and images defects during media and substrate manufacturing. Designed and optimized for metrology consideration, the new AFM is a significant departure from a piezotube-based AFM which suffers from poor repeatability and accuracy due to the intrinsic background curvature and its destructive scan mode. Here, a much extended tip life by the non-contact AFM proved to be crucial in effective defect finding and cost-saving therein. The new AFM solution significantly increases throughput for the defect review process; test runs with real defects demonstrate over 500 - 800% gain in throughput when compared with other methods of defect review.

4.10pm to 4.20pm **Conference Conclusion**

4.20pm **☞ End of Conference ☛**