

# newsletter

## Consolidated curriculum will combine forces

**As a crucial part of the effort to establish a permanent displays platform in Europe, adria recognises the importance of having a workforce which is highly skilled, able to retrain quickly in response to technological and market forces, and a climate in which the personnel are able to fully reach their potential.**



In this edition of the **adria** newsletter we report on moves to create a pan-European Displays Masters degree accessible to both graduates and displays professionals, utilising the skills and talents of educationalists and industry “stars” working at the cutting edge of the new technologies – combining forces is the key!

Only through efficient knowledge transfer and joined-up strategies can Europe hope to establish itself as a serious centre for tomorrow’s display manufacturing capability.

### The adria education task force

The drive to establish an advanced European Displays Masters degree comes from many of the key players in

the education world. The **adria** education task force prepares actions to reach this goal within the project. On page 2 we report on a meeting held at the Swedish LCD centre where the issues associated with setting up a complex degree involving many partner institutions were discussed: Maximum inclusivity was a key concern.

So, if you teach displays courses, please let us know, directly by call or through the **adria** database at <http://www.adria-network.org/forum/>.

The database has reached “critical mass” now: almost 1.900 users have registered and more than 300 profiles have been entered, 120 of them from the universities and research centers. That means that those not choosing to “join the club” are in danger of missing out on the many free benefits.

Sub-masters level vocational training is our second route to teaching. Try it at the next workshop to be held in Bordeaux, France!

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for Industry Professionals

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**14.-16.11.2006**

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**advanced displays research integration action.**

### adria's mission

is to strengthen the advanced display industries in Europe by creating a European platform for advanced displays research and technology



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## Towards an advanced European Displays Masters degree

**A cornerstone of any permanent European displays platform, however it is configured, should be a coherent and advanced education programme. Such a programme must cater for bright graduates, dedicated displays professionals seeking professional development or a retooling of their skills sets, and technicians who need to upskill or learn quickly about emerging new technologies or disruptive shifts in the displays marketplace.**



**adria** has set up a dedicated education and training task force, which has two key remits;

- **to report on the current state of displays education and training in the EU, and make recommendations as to the possible establishment of an advanced Displays Masters degree**
- **to organise and deliver training seminars offering an “executive overview” not only of the various technology elements, but also providing insights into, for example the human factors involved in viewing a display.**

The route to establishing any masters degree which crosses national boundaries will meet with many potential obstacles. One of these is the harmonisation of credit tariffs. Although this has been addressed by the Bologna and subsequent protocols, the situation “on the ground” is often still complex, and trading of credits between institutions can depend not only on the duration and perceived level of effort, but also on the subject matter.

### adria meeting in Borlänge

Here we report on the key outcomes of a very productive **adria** education meeting held in Borlänge, Sweden earlier this year, where this and other issues were addressed by a panel of distinguished academics and Industrialists keen to put forward the “view from Scandinavia”. The meeting also presented a perfect opportunity for co-ordinators of the two existing European displays masters degrees an opportunity to compare notes and explore possibilities for future collaborations. The workshop was chaired by Professor Lachezar Komitov from the Liquid Crystal Physics Group at the University of Gothenburg.

### Curriculum issues

The discussion in the morning session focussed on curriculum issues, specifically the proposed core content and specialised topics required to satisfy the remit for an advanced degree suitable for both graduates and displays professionals. The DisplayMasters content and structure was agreed to provide a very suitable platform from which any new degree could be developed. This degree also provided a useful template for collaborative working, which was seen to be working very efficiently.

### Funding, structure, and the degree

The afternoon session concerned education system funding, system organisation structure, degree

accreditation, harmonization of degree tariffs and course duration.

The main conclusions of the meeting were

- the DisplayMasters template provides the required flexibility useful. This model has proven appeal to the industry.
- the DisplayMaster program could easily be expanded to include new modules on, for example, flexible displays, 3D displays and systems integration.
- possibilities for vertical integration using existing curriculae (including the SwLCD specialisms) would provide the focussed depth necessary to fulfil the course requirements. A number of initial candidate topics were mentioned.
- a pilot program could be established between e.g. Gothenburg University and the University of Dundee
- This program must have depth and width comprehensive different modules. The contents of individual modules have to be agreed upon with an industrial advisory panel.
- a dialogue with universities running displays courses within Europe needs to be established. This should happen through networking and via the **adria** competence mapping tool.

**adria** will publish the findings of the education and training task force in a comprehensive report at the end of the project.



## Report on the first adria training seminar, Pforzheim, Germany, May 9-11, 2006

The first adria training seminar was organised by Club VISU and the University of Pforzheim, and ran from May 9 to 11, 2006.



With the local support of the University of and more specifically the active and enthusiastic collaboration of Professor Blankenbach, who heads the displays group the event was perceived as a great success, especially by those lucky who participated in the "after-work-networking-sessions" in cosy downtown Pforzheim restaurants!

Logistically the event ran very smoothly and most of the key objectives were easily met. The majority of attendees were industry professionals, and their participation was very active during all the three days.

Coming from companies like Alpine, Harman / Becker, JENOPTIK and

OSRAM, they found the 3 days very useful for their day-to-day business., not only from the knowledge and insights gained, but also from the opportunity to network with leaders in the field in an informal and friendly atmosphere.

"An excellent new training scheme for people who want to improve their basic knowledge on advanced displays" as one participant succinctly put it.

Speakers included

- The host, Karlheinz Blankenbach, professor at the University of Pforzheim
- Sebastien Weitbruch (Thomson Brandt),
- Vu Thien Binh (Université Lyon),
- Jose Magarino (Thales Avionics LCD),
- André Van Calster (Ghent University),
- Didier Pribat (CNRS/Ecole Polytechnique),
- Janos Veres (Merck Chemicals),
- Christophe Prat (Thomson), and
- Seamus Burns (Plastic Logic)

The lectures provided an "executive overview" of modern display technology. The interest of participants was evidenced by the quality and number of questions asked during and after the lectures.



Based on evaluation forms compiled after the conclusion of the course, the overall satisfaction rating was very high. A number of suggestions were fed back to the organising team, some of which will be implemented at the next seminar.

The overall program exhibited a good balance between technical topics, application concerns and related issues such as the machine/human interface.

## Upcoming Training in Bordeaux

It's not too late to sign up for the next training seminar. This is scheduled to take place in France from November 14-16, and promises to be another good event, with a programme similar to that delivered at Pforzheim, and plenty of the famous **adria** networking opportunities among the vineyards of la belle France!

Furthermore, the Bordeaux training will be recorded and made available on DVD. Complementary content will be included to support the workshops, a first approach to e-learning. **adria** is soliciting video material for this.

Please see also newsletter 1/2006 for details on **adria** training, updates are available at [www.adria-network.org](http://www.adria-network.org).

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## EU Commission head of unit updates on FP7 at OEC 2006

Well over 300 delegates from 18 countries, and 28 exhibitors joined the 4<sup>th</sup> annual Organic Electronics Conference and Exhibition (OEC06) held on 25-27 September in Frankfurt, Germany. Augusto de Albuquerque, head of the unit G2 "Micro- and Nanosystems" within the Information Society and Media DG (IST) of the European Commission gave the opening speech. He presented an outlook to the Commission's 7th Framework Programme with an emphasis on organic and large area electronics and displays systems.

With a projected budget of 54.6 bn € in the timeframe from 2007 to 2013, it will be once again a major funding effort. Information and communication technologies (ICT) will see more than 9 bn €, which makes this field the biggest slice in the cooperation part of the programme.

Mr. de Albuquerque said that Europe faces an increasing competition on global scale with an acceleration of

innovation cycles in ICT. "Europe needs to position itself in the important parts of the value chain, and should compete" he said. Europe's specific needs drive a growing demand for ICT and therefore provide new opportunities to European industry. To meet the challenges, the EC work programmes will be structured around a set of challenges, not stand-alone research.

Organic and large area electronics and displays systems will be one of the objectives of the new IST work Programme. Topics will be logic, memory and light-emitting functionalities addressing e-paper, low-cost RFIDs, intelligent packaging, displays, signage and intelligent lighting systems. OLED basic components will be considered under the photonics part of the programme.

Important support measures will include synergies between the electronics and the printing sectors, access to advanced manufacturing and design competencies and joint user assessment of prototype equipment.

The first call is expected in January / February 2007 with a budget of approx. 40-50 M€.



With its vision paper and the participation in consultation workshops, **adria** has given a consolidated view for future funding requirements compiled from the input of 95 individuals and supported by a high-level group of 30 key stakeholders (see also newsletter 1/2005). It was very good to hear that the information given by Mr. de Albuquerque reflected a lot of this input. We can be excited how all those new projects in FP7 will push the community ahead!

### Events Calendar

November 8-9, 2006	<b>2<sup>nd</sup> adria FPD standards meeting</b> SEMI Standards autumn event; Dresden, Germany
November 14-16, 2006	<b>3<sup>rd</sup> adria displays training seminar</b> University of Bordeaux I, Bordeaux, France
November 14-17, 2006	<b>electronica</b> World's leading trade show for components, systems and applications, with displays hall; Munich, Germany
November 21-23, 2006	<b>IST 2006 Conference</b> FP7 launch event; Helsinki, Finland

For updated information see [www.adria-network.org](http://www.adria-network.org).

A consortium of six partners – industry and academia networks themselves – provide the adria platform services:

