

Summary of the First International Diamond Cut Conference (IDCC-1) held in Moscow, Russia on the April 23-26, 2004.

Below is an outline of highlights from a few of the presentations from IDCC-1 with an editorial comment on changes, for better, or for worse since 2004. Complete agenda of the conference can be found on <http://www.cutstudy.com/conference/program.htm>

Gabi Tolkowsky and Maarten de Witte (from Hearts on Fire) both gave passionate presentations asking us to question the jargon used in our industry. For example Gabi asked why major labs would not call a newly designed and fashioned diamond by its owners preferred name, for example the Zoe. This could replace the need for the costly legal protection. Instead labs use vague generic names like 'square modified brilliant' to describe commonly known diamonds. Maarten also focused on our 4C's jargon which is not intuitive or commonsense for consumers. As buyers consumers learn the jargon to level the playing field, but they promptly forget it as the diamond takes on the new owners 'stories'. Nothing has changed, although at www.octonus.com/oct/gallery/internal.php universal listings of new and existing cuts is well under way. Please submit any cuts you find missing, or suggest names for those already there but unnamed.

Bruce Harding reviewed the consensus of research noting a relationship between crown and pavilion relationship slopes. Since then AGS and GIA have both implemented round cut grade systems that reflect this principle.

Peter Yantzer, Jim Caudill and José Sasian heralded their new performance based grading systems based on the AGS ASET principle and the concept that a diamond is a 'window to light sources'. Their new grading methodology was a big step forward and has been effective for rounds. However sadly few stones are being submitted for the various other cuts they now also grade. The AGS system does not help the introduction of new cuts.

Nick Del Re gave a description of the various options for intellectual property protection of new cut designs and pointed out weakness' in the

current patent system. Patents themselves can be more unique than the often similar stones they describe. Nick raised the idea of a role for lab's in describing optical performance as a differentiating factor.

Olga Okhrimenko's discussion on brand development is still a very big topic, and one that we invite presenters to cover in IDCC2.

Janak Mistry and Brian Gavin presented on separate but somewhat related topics. In order to guide cutters Labs should provide clear and open information on cut quality factors like proportion, polish, symmetry. Since IDCC1 two labs released software at cutters expense to provide such information. At the Cut Groups insistence some guidance information has since been made available. There are still no clear rules for Hearts and Arrows symmetry pattern standards. Some labs will laser inscribe 'H&A' or report such inscriptions on grading reports which often misleads retailers and consumers as such diamonds are often represented as being given a *de facto* blessing.

Sergey Sivovolenko and Yuri Shelementiev presented a cut grade system based on 3-dimensional diamond models. Basic light responses' (BLR) of different diamonds can be analyzed and compared by computer tools. This approach allows the grading of any diamond cut regardless of shape, facet arrangement and symmetry features. One grouping of basic light responses is ETAS - effective total angular size - that describes the potential of a diamond cut to redirect light from a light source to an observer's eye. The benefit of this new approach for the diamond manufacturing industry is that the enhancement of existing fancy cuts and the creation of better new designer cuts becomes possible. The same grading standards are applied to all shapes, just as other industries such as hotels, wine and cars are rated.

Michael Cowing showed the complexity of basic light response grading by describing the visual difference in contrast in diamonds with differing proportions. The Master Stone Study that the Cut Group announced at IDCC-1 in conjunction with the research arm of HRD (which failed to clear the lawyers hurdles) has progressed slowly. Current developments and master stone information is available at www.octonus.ru/oct/mss/index.phtml