

QUAREP-LIMI WG10 - 2nd meeting - 15/12/2020

Attendees:

Thomas Guilbert, Ulrike Boehm, David Kirchenbuechler, Paula Montero Llopis, Gert-Jan Bakker, Michael S. Nelson, Gerhard Holst, Chieh-Li Chen, Konstantin Birngruber, Santosh Podder, Arne Seitz, Stephen Ogg, Kees van der Oord <Kees.van.der.Oord@nikon.com>, Helena Jambor (helena.jambor@tu-dresden.de), Perrine Paul-Gilloteaux, Michelle Itano, Rodrigo Bammann, Eduardo Conde-Sousa (econdesousa@gmail.com), gaby g Martins (gaby@igc.gulbenkian.pt), Julia Fernandez-rodriguez (juliafer@cci.sahlgrenska.gu.se), Nathalie Gaudreault,

Agenda:

1. Agreement to the recording of the meeting (1 min)
2. Presentation of the WG10: What is Image Quality for us? (15 min)
3. Presentation of 3 Excel spreadsheets (15 min)
4. Organization of the WG10
5. Welcoming round table: Brief new members introduction
6. Scheduling of the upcoming meeting
7. Chat on Zoom

Minutes:

1. Agreement to the recording of the meeting
 - Everyone agrees. Done. → [Link to the recording](#)
2. Presentation of the WG10: What is Image Quality for us?
 - Thomas presents his IQ PowerPoint slides - The slides are located in Roland's server:
<https://bwsyncandshare.kit.edu/apps/files/?dir=/QA%20and%20Reproducibility%20for%20Instruments%20and%20Images%20in%20LiMi/WG%2010%20Image%20Quality&fileid=294805097>
 - He introduces the three IQ tables; Link to the folder with the tables:
<https://drive.google.com/drive/folders/1XykhjZhl-tAuEMFxAjD2Ln8sUdxMWz89?usp=sharing>
3. Presentation of 3 Excel spreadsheets
 - Thomas explains the basic ideas behind the IQ tables
 - [Table1 ImageQualityParameters](#)
This spreadsheet lists image processing and analysis parameters which are linked to IQ.
 - [Table2 MicroscopesIQParameters](#)
This spreadsheet lists microscopy techniques and the respective IQ parameters which are of particular importance to process and analyze the acquired data.
 - [Table3 RankingParameters](#)
This spreadsheet summarizes the results of Table1 and Table2 by creating a microscope and IQ parameter specific ranking system.
If a 10 stars ranking system is set up, how would you rank the importance of

different IQ parameters for every microscopy technique?

- Comments by the group to the tables:

David Kirchenbuechler (DK): How are the techniques chosen we want to describe?

Thomas Guilbert: Current focus on LM core scopes

Julia Fernandez (JF): Different scopes can work in different modes

Thomas: Taken into account by the "Experimental Modi" column

Roland Nitschke (RN): Table should be simplified: a classification system of all IQ parameters in rows and ALL microscopy techniques in columns would allow the boxes to be checked.

- Thomas Guilbert (TG): The first task should be to find and define the IQ parameters

Arne Seitz (AZ): Lots of parameters can be taken immediately from the scopes, others have to be measured

Please review the recordings for all comments

4. Organization of the WG10

- TG: First task should be to find and define the IQ parameters then we will work on table 2 in sub-groups.
- JF: How do we reach a consensus in the group?
- AS: Could we extend the discussion to the entire QUAREP community?
- Gert-Jan Bakker (GJB): Open minutes are important / Transparency
- Gerhard Holst (GH): Doodle Polls?
- Ulrike Boehm (UB): Be transparent, but do not aim for polls after every small result
- AS: Transparent Wikipage?
- RN: Basic vocabulary is needed - Roland will share a link to an ISO document Dictionary of microscopy
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1365-2818.1990.tb02963.x>
ISO
<https://standards.iteh.ai/catalog/standards/iso/1833d78f-e3db-4abf-8bcb-f4e8ee051b6e/iso-fdis-10934>
- Michael Nelson (MN): Shares a link to an image.sc forum entry: "RMS Dictionary of Light Microscopy" [RMS Dictionary of Light Microscopy - Announcements](https://www.rms.org.uk/rms-dictionary-of-light-microscopy.html)
<https://www.rms.org.uk/rms-dictionary-of-light-microscopy.html>

5. Welcoming round table: Brief new members introduction

Introduction of new members:

- ...
- Santosh Podder
- Helena Jambor
- Rodrigo Bammann
- Julia Fernandez
- Arne Seitz
- Kees van der Oord: The application is the driving force
- Eduardo Conde-Sousa
- Chieh-Li Chen: Designs an image quality metric for their scope systems
- Paula Montero Llopis
- Michelle Itano
- Michael Nelson: Willing to run tests to confirm metrics etc
- Steve Ogg: Define a common understanding of what IQ is?
- Konstantin Birngruber (TOPTICA)
- Peter Bajcsy (NIST)

6. Scheduling of the upcoming meeting

- Two meetings per month on Tuesday at 4:30 CET
- The next meetings are on Jan 12 and 26
- **[Updated on 05/02/2021] The first meetings in Jan were canceled due to time conflicts. Next meeting: Feb 9 at 4:00 pm (CET)**
- **To move on nonetheless, 3 new spreadsheets have been set up to focus on SNR, Dynamic Range (DR), and sampling Rate (SR). It has been asked to participants to contribute to these tables with their definitions [email sent out on Jan 25].**

7. Chat on Zoom

16:39:01 De Ulrike Boehm : Link to the folder with the tables:
[https://urldefense.com/v3/__https://drive.google.com/drive/folders/1XykhjZhl-tAuEMFxAjD2Ln8sUdxMWz89?usp=sharing__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZiG9cl98\\$](https://urldefense.com/v3/__https://drive.google.com/drive/folders/1XykhjZhl-tAuEMFxAjD2Ln8sUdxMWz89?usp=sharing__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZiG9cl98$)

16:53:57 De Perrine Gilloteaux : I think also the interest is to be able to associate image analysis algorithm with some criteria: it will work on this range..

16:54:58 De Gaby GM (IGC, 2020) : my apologie everyone. in the middle of a delayed session with a user. I will have no sound though.

16:56:37 De Michael Nelson : And in the widefield category, many if not most whole slide scanners default to lossy compression ^_^

17:00:31 De Perrine Gilloteaux : Indeed.

17:03:30 De Ulrike Boehm : This is the google doc with the minutes, please type in your name if you are here

[https://urldefense.com/v3/__https://docs.google.com/document/d/1PochNMXBUs6__tIhykBxSj7aDDFxm1CIHqgP5m9Mluw/edit?usp=sharing__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZK2N6u3k\\$](https://urldefense.com/v3/__https://docs.google.com/document/d/1PochNMXBUs6__tIhykBxSj7aDDFxm1CIHqgP5m9Mluw/edit?usp=sharing__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZK2N6u3k$)

17:12:33 De Michael Nelson : I think they were just talking about updating that

17:13:02 De Michael Nelson :
[https://urldefense.com/v3/__https://forum.microlist.org/t/rms-dictionary-of-light-microscopy/1187__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZjJiHg0o\\$](https://urldefense.com/v3/__https://forum.microlist.org/t/rms-dictionary-of-light-microscopy/1187__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZjJiHg0o$)

17:15:41 De Michael Nelson : And that post includes a link to the list of terms.

17:16:59 De Roland Nitschke LIC Uni Freiburg :
[https://urldefense.com/v3/__https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1365-2818.1990.tb02963.x__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZX9EA8U8\\$](https://urldefense.com/v3/__https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1365-2818.1990.tb02963.x__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZX9EA8U8$)

17:17:11 De Roland Nitschke LIC Uni Freiburg : Dictionary of microscopy

17:18:25 De Roland Nitschke LIC Uni Freiburg :
[https://urldefense.com/v3/__https://standards.iteh.ai/catalog/standards/iso/1833d78f-e3db-4abf-8bcb-f4e8ee051b6e/iso-fdis-10934__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZC0XaYzw\\$](https://urldefense.com/v3/__https://standards.iteh.ai/catalog/standards/iso/1833d78f-e3db-4abf-8bcb-f4e8ee051b6e/iso-fdis-10934__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZC0XaYzw$)

17:18:29 De Roland Nitschke LIC Uni Freiburg : ISO

17:19:45 De helena jambor : Oh and I forgot: I am just having an alcohol-free beer, do not worry about me.

17:28:56 De Dr Paula Montero Llopis : sorry, everyone, I need to jump to another meeting. Thank you all!

17:33:29 De Gaby GM (IGC, 2020) : sorry. I cannot speak...but I am indeed here.

17:35:30 De Gerhard Holst : Since it is not released, it cannot be purchased, or am I wrong?

17:37:53 De nathalieg :
[https://urldefense.com/v3/__https://en.wikipedia.org/wiki/Signal-to-noise_ratio__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZahKskxs\\$](https://urldefense.com/v3/__https://en.wikipedia.org/wiki/Signal-to-noise_ratio__;!!Eh6p8Q!XBM0dUK5UkZS5eYkyoJXqLeSvKzjktQt76Crjqv7QvXvSXixzn3QB9hathGZahKskxs$)

17:41:23 De Rodrigo Bammann : The ISO 10934:2020 has been published. It costs 38 CHF by the look of it.

17:47:36 De Gert-Jan Bakker : Thank you Gerhard

17:49:36 De Michael Nelson : Holidays mean I can definitely make the meeting!

17:51:01 De Gerhard Holst : This can sum up to be a lot, if you are attending more than one WG

17:51:02 De Michael Nelson : Time is good as long as it ends by now :)

17:51:37 De Michael Nelson : Speaking of, I need to head to work! Thanks all!

17:51:52 De Thomas GUILBERT : Thank you !!

17:52:04 De Julia Fernandez : I need to leave! Hope you have great Holiday!

17:52:07 De Rodrigo Bammann : Agree with Gerhard. Might take a lot of time if you have more than one WG.

17:54:49 De Perrine Gilloteaux : thank you!

17:55:01 De David Klrchenbuechler : bye