Welcome to this first meeting in the IIR working group about refrigeration safety

My name is Alexander Cohr Pachai – most call me Alex – and I come from Denmark. I will be the chairman of the working group Refrigeration Safety

Safety is a life long exercise and it never ends because we all the time develop new technologies, new ways of using refrigeration and new refrigerants.

The working group has actually existed since 2004 and the aim from the beginning was to look in to existing databases with information about accidents and then analyse them and see what happened and list the learnings. This turned out to be more difficult and first hoped for.

This time we will leave the historical data behind and focus on data as the accidents and incidents that happen now. We se articles every now and then in the news paper all over the world. And because we in this work group don’t read all these news paper and even more, don’t understand all languages, the idea behind this work we start today is to involve as many as possible.
It is not required that you are member of IIR to report to this group and work with us. But I can only recommend all of you with the financial mean and will to participate fully in this work to become a member. The members list include persons that do not have the financial strength to pay the fee but they have the will to participate in our work by reporting and helping with translation from their local language to English so we can understand what happened. To give an example: I don’t understand any Hindu, so it is good that I have friends that can translate it for me to understand what happened.

Today we have two speakers. The first speaker is Holger König from Germany. Holger will talk about Risks, Accidents and Standards and he has many years of experiences with risk assessments projects, explosion testing, and other issues related to flammable refrigerants. He will talk about Hydrocarbons and especially Fluorinated gases with focus on risk during the introduction of the new fluids entering the market. Some have their own new risks. It is here the historical data does not help us much because the new fluids have their own new problems and the old had their problems. The world has changed from the days where we were driving the service van with 3 cylinders in the back R-12, R-22 and R-502. Now we are moving from R-134a and R-404A/R-507 to a lot of new fluids with new properties. But did the standards follow the development
in all aspects. Does the standards help us on to the new refrigerants? It is my dream that we can make a living guideline that can be distributed globally as we learn about all these new fluids with information about what to be aware of to stay safe.

The second speaker is Niels Vestergaard from Denmark. Niels has many years of research in ammonia accidents behind him. We will hear about what statistics show about the risks with ammonia and ammonia systems. Also with ammonia refrigeration systems we see a lot of development and changes in the way we do things. New valves and technologies emerge and can give us early warnings, but are there things that we have to know?

I have been asked many times: what do you expect to get out of this work? Can it be done? I believe that we all have the right to come home from our jobs in the same shape as when we left home in the morning. I also know accidents will happen, but we must do our best every day to avoid the accident. If the accident happens I would like that I at least did what I could to prevent it and that I followed the rules and guidelines for safe working with what I’m doing. I would also like that others learned from my mistake so next time others would know better and avoid the same result. So to answer the second question, can it be done? Yes, we can, together we
can do it. We as community need to work together to make this industry safer – both to save as many lives as possible, and to make it more attractive to new generations to enter our industry. We have to do it and we can

Thank you for your attention and now the first speaker