

Salt and Light

In the Sermon on the Mount Jesus Christ says to his disciples (St. Matthew 5:13-14):

13. *Ye are the salt of the earth: but if the salt have lost his savour, wherewith shall it be salted? It is thenceforth good for nothing, but to be cast out, and to be trodden under foot of men.*
14. *Ye are the light of the world. A city that is set on an hill cannot be hid.*

Here, Jesus talks about a physical effect, which was known of as a phenomenon the latest since Moses, namely that common salt colors each flame into yellow-orange. The precise color in physics is specified by 589.5923 nm and 588.9953 nm wave-length ([1993BSN], table 2.1, page 209). It is the color of the sodium steam lamps at several zebra crossings.

By command of God Moses ordered, that all sacrifices must contain salt (Leviticus 2:13). Thus the connection between salt and light in a fire was known by the disciples of Jesus during the Sermon on the Mount.

Being a student the author used an oil stove in his room, and there once he tried, what salt causes in a fire. The result was amazing:

There is a need of very few salt to change the flame color from usually blue into yellow. Furthermore the author recognized after some time, that the soot in the stove continually decreased and finally even in the stove-pipe had completely disappeared. In the stove remained red rust being cleansed of soot, which the author easily could crumble away by hand. This caused much less dust than removing soot. After this purification the burner ring, from which usually the flames start, almost looked like new, at several places already the metallic brightness of iron being purified in a fire was seen.

Of course, Moses ordered also, that all war spoil being fire resistant shall be cleansed in a fire (Numbers 31:23). Salt and fire does not suddenly cause any metal to melt, but it purifies the metal thoroughly. Salt and water however advances the rust. Without salt, oxidized metal mainly can be purified (chemically reduced, [2002Blu]) in a plasma burning chamber by high energy consumption. The chemists characterize the salt both in water and in fire as a *catalyst* (see [1987MM], chapter 14.8., page 246ff).

Thus this catalytic function the Lord Christ Jesus has foreseen for his disciples. Perhaps also you once have asked yourself: "What shall I cause as a Christian in my family, in my school, or at my working place?" The answer is very simple: We shall "shine" in the fire of discussion in the sense of the Beatitudes (St. Matthew 5:3-12), namely by meekness, mercy, and peacemaking answer to all troubles of our life. This will have an effect like salt in a fire.

A city on a mountain can be seen from a very far distance, yet. So the city of Schillingsfürst [Shilingsfirst] between Rothenburg [Rotenburg] ob der Tauber and Ansbach often can be seen from Aalen's Aalbäumle [Albaimle] by binoculars only. But very rarely the roofs of Schillingsfürst shine in the brightness of sun, then also by naked eye a shining red point is recognized at the horizon of the Aalbäumle (with tower 702 m above sea level).

Christ Jesus says (St. John 3:12):

If I have told you earthly things, and ye believe not, how shall ye believe, if I tell you of heavenly things?

References

[1987MM]

(Charles E.) Mortimer, (Ulrich) Mueller: *Chemie - Das Basiswissen der Chemie - Mit Übungsaufgaben [Chemistry – The Basics of Chemistry – with Exercises]*, Georg Thieme Verlag Stuttgart, New York, 5th completely new edited and expanded edition, (1987)

[1993BSN]

(Ludwig) Bergmann, (Clemens) Schaefer, (Heinz) Niedrig: *Lehrbuch der Experimentalphysik [Textbook of Experimental Physics]*, volume **3 Optik [Optics]**, Walter de Gruyter, Berlin and New York, 9th edition (1993)

[1994HolyBible]

King James' Authorized Version of the Holy Bible, The text is considered to be completed since the council of Karthago, (397); King James' Authorized Version of the Holy Bible, (1769); Webster Update, (1833); Oxford University Press, (1994)

[2002Blu]

(Rolf-Dieter) Blumer: *Personal information to the author*, Landesamt für Denkmalpflege Baden-Württemberg [Country Office for Memorial Conservation in Baden-Wirtemberg], location Schwäbisch Gmünd [Shwebish Gmend], (2002)

[2011Sued]

(Norbert) Suedland: *Andacht für den Aalener Posaunenchor [Devotion for Aalen's Trombone Choir]*, Aalen [Alen], (2011)