



Satuan Acara Pengajaran

MTB82152 - Proses Pelapisan & Inhibisi

Pengajar

Prof. Dr. Ir. Johny Wahyuadi Mudaryoto DEA.

Minggu 1

Materi 7/2/07
INTRODUKSI: (Chap 1 ref 1, Chap 4 ref 2)
- Penjelasan SAP, Sistem Perkuliahan & penilaian
- Prinsip Proteksi Korosi
- Organik coating, metalik coating, proteksi katodik

Media LCD

Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., "Electroplating Handbook", 3rd.
4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 2

Materi 14/2/07
Prinsip pelapisan : (Chap 2 ref 1)
- rheology
- surface chemistry
- sagging and slumping
- leveling

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Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., "Electroplating Handbook", 3rd.
4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 3

Materi 21/2/07
Teori Adhesi 1 (Chap 3 ref 1)
- Jenis ikatan
- Pengujian adhesi
- Jenis kerusakan pada pelapisan

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Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., "Electroplating Handbook", 3rd.
4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 4

Materi 28/2/07
Teori Adhesi 2 (Chap 3 ref 1)
- Jenis korosi akibat pelapisan organik
- Tahapan proses korosi

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Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., "Electroplating Handbook", 3rd.
4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 5

Materi 7/3/07
Persiapan permukaan (Chap 4 ref 1, Part I ref. 3)
- Persiapan logam dasar
- Persiapan permukaan logam
- Persiapan permukaan non logam
- Aplikasi 1

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- Referensi**
1. "Coating and Painting", 2005
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
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Minggu 6

- Materi** 14/3/07
- Komposisi cat (Chap 5 & 6 ref 1)
 - Material Pelapis Non Logam
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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
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 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 7

- Materi** 21/3/07
- Pemilihan pelapis (Chap 7 & 8 ref 1)
 - Aplikasi 2
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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 8

Materi 28/3/07
Ujian Tengah Semester

Media

Referensi Kuliah ke 1 sampai dengan ke 7

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Minggu 9

Materi 4/4/07
Pelapisan Logam (Chap 10 ref 1)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 10

Materi 11/4/07
Conversion coating, Cementitious coating, monolithic (Chap 11, 12, 13 ref 1)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 11

Materi 18/4/07
Comparative resistance coating and painting (Ch 9 & 14 ref 1)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 12

Materi 25/4/07
Anodizing (Part I Chap 14 E ref 3, ref 7)

Media LCD

- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 13

Materi 2/5/07
Introduction Inhibitor (Chap 15 ref 5, ref 6)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 14

Materi 9/5/07
Mekanisme inhibitor (Ref 6)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 15

Materi 16/5/07
Aplikasi inhibitor

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 2. Chatterjee U.K., Bose S.K., Roy S.K., "Environmental Degradation of Metals", Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., "Electroplating Handbook", 3rd.
 4. Frederick A. Lowenheim, "Modern Electroplating", 3rd, The Wiley International Publs., New York, 1974.
 5. Denny A Jones, "Principles and Prevention of Corrosion", Hearle, 2nd, Macmillan Publs. Co., New York, 1992.
 6. Nathan C.C., "Corrosion Inhibitor", NACE, Houston, 1997.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 16

Materi 23/5/07
Presentasi

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Referensi

Aktivitas

Minggu 17

Materi 30/5/07
Minggu tenang

Media

Referensi

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Minggu 18

Materi 5/6/07
Ujian Akhir Semester

Media

Referensi

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