



# Satuan Acara Pengajaran

MTB82152 - Proses Pelapisan & Inhibisi

Pengajar

*Prof. Dr. Ir. Johny Wahyuadi Mudaryoto DEA.*

## Minggu 1

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

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**Media**            LCD

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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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**Aktivitas**        Kuliah dan diskusi

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## Minggu 2

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**Materi** Prinsip pelapisan : (Chap 2 ref 1)  
rheology  
surface chemistry  
sagging and slumping  
leveling

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**Media** LCD

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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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**Aktivitas** Kuliah dan Diskusi

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### Minggu 3

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**Materi** Teori Adhesi 1 (Chap 3 ref 1)  
Jenis ikatan  
Pengujian adhesi  
Jenis kerusakan pada pelapisan

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**Media** LCD

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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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**Aktivitas** Kuliah dan diskusi

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## Minggu 4

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**Materi** Teori Adhesi 2 (Chap 3 ref 1)  
Jenis korosi akibat pelapisan organik  
Tahapan proses korosi

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**Media** LCD

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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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**Aktivitas** Kuliah dan diskusi

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## Minggu 5

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**Materi** 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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**Media** LCD

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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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**Aktivitas** Kuliah dan Diskusi

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## Minggu 6

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**Materi** - Komposisi cat (Chap 5 & 6 ref 1)  
- Material Pelapis Non Logam

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**Media** LCD

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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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**Aktivitas** Kuliah dan Diskusi

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## Minggu 7

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**Materi** Pemilihan pelapis (Chap 7 & 8 ref 1 )  
Aplikasi 2

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**Media** LCD

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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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**Aktivitas** Kuliah dan diskusi

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## Minggu 8

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**Materi** Pelapisan Logam (Chap 10 ref 1)

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**Media** LCD

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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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**Aktivitas** Kuliah dan Diskusi

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## Minggu 9

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**Materi** Ujian Tengah Semester

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 10

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**Materi** Conversion coating, Cementitious coating, monolithic (Chap 11, 12, 13 ref 1)

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**Media** LCD

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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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**Aktivitas**      Kuliah dan diskusi

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## Minggu 11

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**Materi**            Comparative resistance coating and painting (Ch 9 & 14 ref 1)

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**Media**             LCD

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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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**Aktivitas**      Kuliah dan diskusi

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## Minggu 12

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**Materi**            Anodizing (Part I Chap 14 E ref 3)

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**Media**             LCD

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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  
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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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**Aktivitas**      Kuliah dan diskusi

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## Minggu 13

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**Materi** Introduction Inhibitor (Chap 15 ref 5, ref 6)

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**Media** LCD

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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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**Aktivitas** Kuliah dan diskusi

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## Minggu 14

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**Materi** Mekanisme inhibitor (Ref 6)

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**Media** LCD

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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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**Aktivitas** Kuliah dan diskusi

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## Minggu 15

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**Materi** Aplikasi inhibitor

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**Media** LCD

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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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**Aktivitas**      Kuliah dan diskusi

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## Minggu 16

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**Materi**      Presentasi

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**Media**      LCD

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**Referensi**

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**Aktivitas**      Diskusi

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## Minggu 17

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**Materi**      Presentasi

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 18

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**Materi**      Ujian Akhir Semester

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**Media**

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**Referensi**

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**Aktivitas**

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