#### E-preservation for Academic Events(VOD) and Insect collection

SNU Library



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# About SNUL

- Founded in 1946.
- This Library building was built in 1975
- The six-story Library building has over 4,000 seats for reading with a collection of 2.6 million volumes
- It has 7 branches: College of Law, Medicine, Agriculture and Life Sciences, Business Administration, Social Sciences, Dentistry and International Studies.
- The library works very closely with over 80 small libraries in the university.
- It serves about 30,000 undergraduate and graduate students and 2,000 faculty members.

# SNUL websites

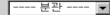
- SNUL main
- SNU Digital Library
- 7 branches
- 6 specific websites for digital collections
  - Insects for insect specimen
  - SNU archives for the historical materials
  - Photos for SNU
  - Newspapers for SNU News
  - MEDCON for medical slides
  - Academic Events(VOD) for SNU academic events

## SNUL main\_(http://library.snu.ac.kr)



개인정보보호정책 이메일주소 무단수집거부 홈페이지 개편안내

151-749 서울시 관악구 신림동 산 55-1번지 서울대학교 중앙도서관 TEL : 02-880-8001 [2 Convright(c) 2006 By Secul National University Library, All rights reserved --관련사이트-- ▼



# SNU Digital ibrary (http://sdl.snu.ac.kr) Image: State of the state o



# SNU Digital Library - Background

- Information resource environment changes in art and science
- New technologies for contents construction and expression
- Claim for new media
- Diversity in user's information requests and needs

SNU Digital Library - Functions

- Collect materials in special subjects
- Digitalize materials for preservation and accessibility
- Maintain resolution of the original formats
- Develop metadata formats based on the materials' unique features to provide effective searching
- Provide digitalized files on the Web

# SNU DigitaLibrary collections

- Over 20 digital collections
  - Rare books, medical slides, music score and audio files, art collections and more
- Digital content is available as part of an integrated system (SNU Digital Library / SNUL main)
- Two of the most popular digital collections
  - Academic Events(VOD) (http://event.snu.ac.kr)
  - Insects Collections (http://insect.snu.ac.kr)

## Academic Events website



## Purpose

- Preserving academic events
  - Collecting the academic events throughout the campus
  - Replaying the events on the web whenever and wherever
  - Maintaining a user-friendly VOD system
  - An event holder, i.e., a lecturer or an institution, is not charged for recording: all expenses are paid by the library

# VOD of Academic Events

- Started to provide event information in 2001
- When the library collects event information, it also requests permission to take pictures of the event and to serve VODs to the public.
  - This allows the Library to collect and disseminate information, which is essential to developing academic content
  - A bulletin board(requesting the event recording) is provided

## Request list for event recording

		사울대학교 학술행사 · 간략검색	● VOD 촬영신청	청 촬영산청 신청리스트 동의서출력 이용안내 FAQ	
		› 상세검색	▶ 신청리스트		
교 학술행사 - 학술행/	사 Vod 신청 – Microsoft Internet Explorer	› 가나다검색		의 저작권은 서울대학교에 귀속됩니다.	
편집( <u>E</u> ) 보기( <u>V</u> )	즐겨찾기( <u>A</u> ) 도구( <u>T</u> ) 도움말( <u>H</u> )	→ 유형별검색 → 신청기관별검색	▷ 신쳥종류	촬영	
• 🕞 - 🗙 💈	👔 🔎 검색 🏡 즐겨찾기 🚱 🔗 🍓 🖬 • 🗍 🖡	▶ 행사일검색	· · · · · · · · · · · · · · · · · · ·	별 6 학술회의	
0 1 1	c,kr/EventVod,jsp?file=List	› 게시판	▷ 파일형태	비디오	
napiyy even, ond, de	c, Ny Eventrod, jop mic-Elot	I BEA	▷ 이용범위	학내	
		- Calan	▷ 신청자명	김영애	_
대학교 학술행사		2	▶ 연 락 쳐	9374	
N AU	• VOD 촬영신청		∍ E-mail	kimya@snu.ac.kr	
검색			≥행사명	2006 PRDLA/PNC/ECAI 연례총회	
섬색	▶ 신청리스트		· · · · · · · · · · · · · · · · · · ·	2006 PNC Annual Conference in conjunction with PRDLA and ECAI	
나검색	요즘 사회의 사무의 관객이야. 나이관하는데 귀스럽다고!	And I statistics	<ul> <li>&gt; 강연자</li> <li>&gt; 강연자 소속</li> </ul>	총회발표자 	
별검색	모든 신청된 산물의 저작권은 서울대학교에 귀속됩니다.	#12 1 ···	○ 6 년 1 년 ▷ 주최기관	서울대학교 도서관	
l관별검색	* VOD 촬영서비스는 학술적으로 가치가 있는 정보의 촬영 및 인코딩을	Quick Search · 검색	> 일 자	2006.08.15 ~ 08.18	
일검색	* 학내 각 단위 기관에서 멀티미디어 콘텐츠로 구축될 만한 학술정보를 (		▷시 간	09:00~17:30	
<u>판</u>	★ 상 日 Ⅰ 신청 E 심사중 C 구축충 UU 웹서비스 R		▷장소	서울대학교 호암교수회관, 컨벤션센터	
			▷ 키워드		
ME A	진행상태: 전체 💌		BU 8	서울대학교 중앙도서관이 주최하고 PNC, PRDLA 가 주관하는 국제학술행사입니다.	_
- Total			한 연종 맥스트	트 파일명 및 관련장보	_
	📕 번호 제목 강면자 신청/	자 행사명	일자 신청종류		
	SOLARSIII 유니코드 기반 학 김기 : □ 1 술정보시스템 학술발표회	SOLARSIII 유니코 숙 드 기반 학술정보시 스템 학술발표회	2006,08, 25,금요일 <sup>촬영</sup>		
	2006 PNC Annual	2006 애 PRDLA/PNC/ECAI 연례총회	2006,08,15 ~ 08,18		
1. 4	3 도서전시회개회식 김미형	해교60주년기념 도 향 서전시회	2006,08,08 촬영		
	_ 많			m	

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## Agreement on VOD Services

- With the following conditions, I (we) agree that library provides the Academic VOD services after taking pictures of academic events such as lectures, seminars for accelerating academic development.
- 1. Allow that SNU library digitize my(our) academic works for Internet online services and preservation on the condition that the contents are not changed.
- 2. Agree that library makes my(our) academic works into database(ASF format) and distribute or transmit them via internet.
- 3. Prohibit users from reproducting or reprinting of distributed academic VODs and using it with commercial purpose.
- 4. Seoul National University has digital works'(VOD) copyrights.
- 5. Restrict users as followings. (Please check the box)
  - ? open to the public ? permit use within the campus Date :

Title of Work :

Name :

Signature :

#### The President of Seoul National University

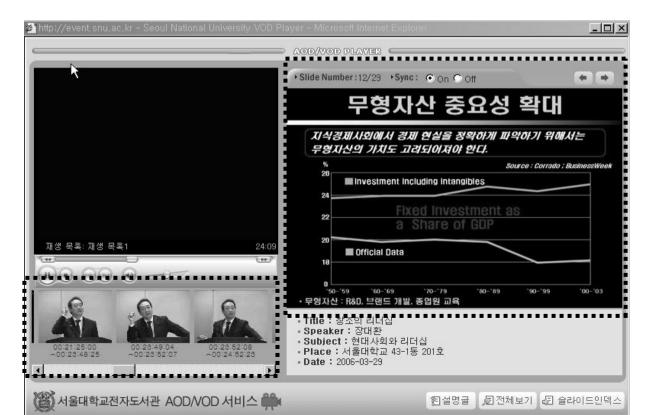
Copyright management system

- Not allow to save the VOD files
- Not allow to capture the VOD images
- Allow to play the VOD within the campus only if an event holder checks the "permit use within the campus" option



## VOD viewer

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- Link with the PPT or Word files on the screen
  Divided with the parts
  - User can move to a specific part and play it



#### Construction status – Academic Event

- Construction status from 2001 to present
  - VOD : 44,134 min. (735 hours)
  - AOD : 33,881 min. (564 hours)
- Annual expenses for VOD
  - About \$30,000 60,000
  - Including the taking-pictures and encoding them

## Metadata for Academic Events(VOD)

- For metadata, events are classified under 3 categories.
  - Conference, session and article (hierarchical depths)
  - Group or single articles
- Event type information is also provided.
  - Conference(including symposium), workshop(including seminar), lectures, presentation, exhibition, medical treatment, etc.

#### Metadata sets for Article

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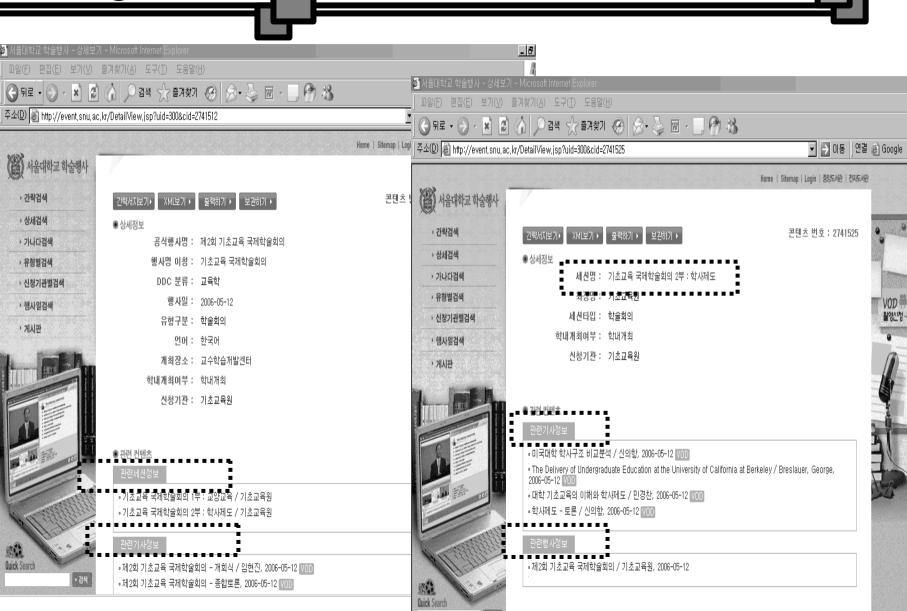
Bement	Element refinement	Definition
do:title(m)		
	snuterms:mainTitle	Title
	doterms:alternative	Another title
detereator		Author or lecturer
	v Card: FN(D)	
	vCard:N(D)	
	v Card: BDAY	
	vCard:ROLE	
	v Card: EM AIL	
	vCard:ORG	
do:subject(m)		Subject
do:description		Note
	daterms.tableOfContents(D)	Table of Contents
	doterms:abstracts(D)	Abstracts
	snuterns:keywords	Keywords
do:date(m)		Date
dottype(m)		Type :conference, seminar, lecture, etc
do:coverage		Coverage
	doterms:spatial	Spatial
	doterms temporal	Temporal
do:language(m)		Language
do:relation		Relation with other items
	snuterns:isArticleOfConference	Has conference
	snuterns:isArticleOfSession	Has session
	snuterms:metaAccess	
de format		Format
	daterms:extent	Extent
do:identifier		Identification
de:rights		Rightmanagement
snu:place		Place
	snuterns:placeType	Owned by SNU(WN)

# Metadata sets - conference/ session

Element	Element refinement	Definition
dotitle(m)	Eremerer er en rententent	Denniser
	snuterms:mainTitle	Tile
	doterms:alternative	Another title
	snuterms:eventNumber	Number of conference
de:contributor(m)		Contributor
	vCard:FN(D)	
	vCard:N(D)	
	v Card: BDAY	
	vCard:ROLE	
	vCard:EMAIL	
	vCard:ORG	
dc:subject(m)		Subject
dc:description		Note
do:publisher		Publisher
dc:date(m)		Date
	snuterms:startDate	Start
	snuterms:endDate	
dotype(m)		Type : conference, seminar, lecture, etc.
do:coverage		Coverage
	dcterms:spatial	Spatial
	dcterms.temporal	Temporal
do:language(m)		Language
do:relation		Relation with other items
	snuterms:hasArticle	Has Article
	snuterms:has Session	Has Session
dc:identifier		Identification
do:rights		Right management
snu:place		
	vra:creation Site	location
	snuterms:placeType	Owned by SNU(Y/N)

Bement	Bement refinement	Definition
do:title(m)		Title
	snuterms:mainTitle	
	daterms:alternative	
de:contributor		Contributor
	vCard:FN(D)	
	vCard:N(D)	
	vCard:BDAY	
	vCard:ROLE	
	vCard:EMAIL	
	vCard:ORG	
do:subject		Subject
do:type		Type : conference, seminar, lecture, etc.
do:relation		Relation with other items
	snuterms:hasArticle	Has Article
	snuterms:isContainedBy	Has conference
do:identifier		Identification
dc:rights		Right management
snu:place		
	snuterms:placeType	Owned by SNU(Y/N)
	snuterms:requestDept	Application Dept(or Institution)

#### Categories for Academic Events



## Academic Events Retrieval

- Search field : Title, lecturer(author), institution(event holder), keyword and so on
- Search system
  - Quick search
  - Advanced search
  - Alphabetical browsing
  - Event type browsing
  - Institution(event holder) browsing
  - Event date browsing



# Insect collection



## Purpose

- Offer high quality images
- Demage prevention of sample to utility of digitalized data
- Support faculty research and help students with studying
- Support requests for information from general users
- Extend and diversify electric library contents



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SNU Insect Specimen Room has 300,000 specimen dating from the 1930s - present



## Insect Collection

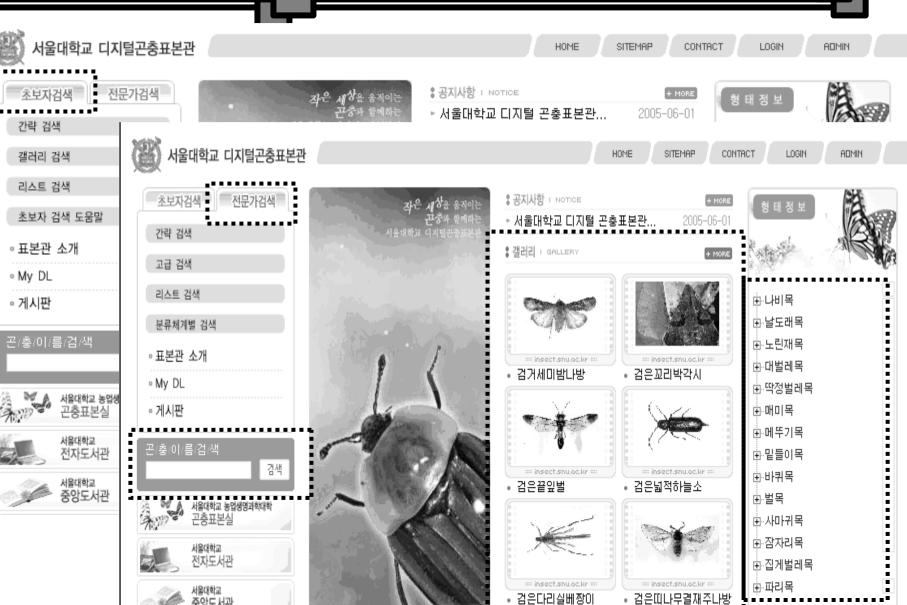
- Photograph and digitalize samples from the SNU Insect Specimen Room
- Construction status

Year	Quantity	Content	
2004	1,600	Specimen pictures and VR	
2005	2,711	Specimen pictures(1550)	
		Ecology pictures (1161)	
TOTAL	4,311	(About \$210,000)	

## Features of Insect Collection

- Fine structure photographing with over 40 magnifications(microscope photographing) and details structure photographing(close-up photographing) with over 4.5 times to capture high-quality images of specimens
- Photographing with the concept of 'the Small World, Big Motion'
- 3,200 \* 2,400 pixels, which is the best resolution in Korea for insect specimen
- Retrieval system developed both taxonomists and general users
  - Quick search, gallery browsing, etc. for general users
  - Advanced search, taxonomic search, etc. for taxonomists

# Retrieval system for Insect Collection



#### An example from the collection



## Images of Insect data

- Two types of insect collection
  - Specimen pictures and ecology pictures
  - Cross-reference between specimen and ecology pictures

서울대학교 디지털곤충표본관	ноне	SITEMAP CONTRCT LOGIN ADMIN	서울대학교 디지털곤충표본관		HOME SITEMAP CONTACT LOOM ADMN
도보자검색 전문가검색 적문가검색 적	'작은 세상숙, 관 유지역' 고중생태 상세정보	Home > 곤총 표본 > 곤총생태 상세정보	초보자검색 전문가검색 간략 검색	'작은 세상숙 , 큰 유지엄' 곤충표본 상세정보	Home > 곤충 표본 > 곤충표본 상세정!
러리 경색 스트 경색 보자 경색 도움말 본진 소개 프루젝트 소개 근축사단철 소개 구축(편) y DL 시판		국 명 : 왕사대가 학 명 : Tenodera aridfola (Stoll) 과 명 : 사미가과 Manidae	33년의 검색 리스트 검색 초보자 검색 도움알 • 표본관 소개 문자배 소개 주유방방 소개 · My UL		국 명 : 왕사대기 역 명 : Tencelara aristybila (Stoll)
·이·클 검 색	図 Alarina (XR男を告出所当) 図 Alarina (XR男を告出所当) 図 (2) (4) (4) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5		* 개시판 관·중 이/로 경/색 중//// · · · · · · · · · · · · · · · · ·	W ABORA CAREGENE	과 영 : 사미귀과 Mantidae 옥 영 : 사미귀족 Mantidae 오이슈 아이슈 (아이자보기) · · · · · · · · · · · · · · · · · · ·
중앙도서관	촬영정보		서울대학교 중앙도서관	표본정보	
서울대학교	· 촬영지 라벨 산형 · 촬영자	구덕서	서울대학교	• 채집지라벨 광교산	· 채집자 신세영
	- 이미지킷수 3 컷 · 월영지	경상남도 남원시 산청군 산청읍 산청		* 이미지컷수 7 컷	· 채집지 경기도 용인시 수지읍 신봉리 광교산
	* 소장기관 서출대학교 곤총표본실 * 촬영날파	2005-09-08		· 소장기관 서울대학교 곤충표본실	- 채집날파 1994-09-24
	* 사진설명 성충				
	중정보			중정보	
	- 몸길이 몸길이는 70~95 mm0ICF.			* 음길이 몸길이는 70~95 mm이다.	
	용이 크고 북적 또는 갈색이다. 앞가슴은 장대하고 앞가두근 것의 것은 뒷질함이 분의 많고 홍강 운동가 4 위에 미소한 4 관은 크기가 보통인데 뒷쪽으로 갈수록 가늘어지고 말단은 기가 있고 입었지 곳은 삼객쉽이고 말단의 관람은 적다. 더듬! 고리 끝의 뒷쪽	과립렬이 있다. 배는 앞가슴보다 길고, 수컷의 버금생 삼각형으로 되었다. 그 밑에는 작은 미모 같은 부속		컷의 것은 뒷절반미 분명치 않고 증           * 형태정보         식판은 크기가 보통인데 뒷쪽으로	앞가슴은 장대하고 옆가두리의 수평부는 족이 때우 좁고 그 치열은 뚜렷하나. 동양 중동기선 위에 미소한 과립들이 있다. 배는 앞가슴보다 결고, 수컷의 바람 할수록 가능이고고 말한은 삼각성으로 되었다. 모델바는 작은 이외 말[금] 1 말단의 판편은 작다. 더듬이는 할고 수컷의 것은 특히 짧다. 앞날개는 막질이?
	*생태정보 유식성 곤충으로 다양한 동물을 포식한다. 교미 중에는 암컷 *생태정보 귀의 알집보다 굵고, 모양은 양족 또는 한족 모서리가 편평하다	이 수컷을 잡아먹는 습성으로 유명하다. 알집은 사마 계 짧은 원통형에 가깝다.		● 생태정보   귀의 알집보다 굵고, 모양은 양쪽 5	포식한다. 교미 중에는 암컷이 수컷을 잡아먹는 습성으로 유명하다. 알집은 사[ 또는 한쪽 모시리가 편평하여 짧은 원통형에 가깝다.
	· 출현시기 4월말~10월말까지 년1회발생			· 출현시기 4월말~10월말까지 년1회발생	
	· 분포 한국, 일본, 동남아시아			• 분포 한국, 일본, 동남아시아	
	· 출처 김진열, 1998, 쉽게 찾는 우리 곤충			<ul> <li>출처 김진일, 1998, 쉽게 찾는 우리 곤충</li> </ul>	

## Metadata sets for Insect Collection

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Element	Bement refinement	Definition
dc:identifier		
	snuterms:identifier	Identification
dotitle(m)		Title
	snuterms:mainTitle	Title (Korean species name)
	doterms:alternative	other title
	doterms:species_e	scientific species name (Latin)
	snuterms:genus_e	scientific genus name (Latin)
	snuterms:genus	Kore an genus name
	snuterms.family_e	scientific family name (Latin)
	snuterms.family	Korean family name
	snuterms:order_e	scientific order name (Latin)
	snuterms:order	Korean order name
do:subject		
	snuterms:speciesID	Code of Korean insects species
	snuterms:gender	distinguishment of both sex
	snuterms:live_type	separation of ecological type
	snuterms:hostPlant	host plant name
	snuterms:habitat	habitat
	snuterms:keywords	keyword

Bement	Bement refinement	Definition
do:description		
	snuterms:collector	collector
	snuterms:collect Date	collecting date
	snuterms:location	colleting locality
	snuterms:general	general note
	snuterms:live_general	explanation of ecological photo.
	snuterms:species_len	body length of specimen
	snuterms:species_phy	morphological information
	snuterms:species_eco	ecological information
	snuterms:species_app	appearance period of adult
	snuterms:species_dis	distribution of the species
	snuterms:species_src	literature source of the species
dctype		
	daterms.type	Type(specimen, ecology)
deformat		
	daterms.format	Format(Image, AOD, VOD, etc.)
	daterms:extent(D)	file size
do:language		
	(dater ms:language	Language
snu:place		
	snuterms:requestDept	Application Institution

## Metadata sets for Insect Collection

- Data input by Dr. Seunghwan Lee(professor) and his lab students who take charge of SNU Insect Specimen Room
- Features
  - No creator information (vs. Dublin Core)
    - Collector is not an important element.
  - Classification (taxonomy or identification) is the key element to describe and search the specimen
    - > Species, genus, family, order

Copyright management system

- Not allow to save the images
- Not allow to capture the images
- Not allow to print the images
- But, you can see the images with watermark on the screen

# Conclusion

#### Role of the library

- Controlling all academic and historic materials for the purpose of archiving and sharing the human knowledge
- Supporting users with well-designed retrieval systems
- Issues
  - Copyright issue
    - > "More open to the public" vs. "more keep the rights"
  - Budget
    - Supported by Special Budget (BK 21 Information Infra Formation Project) from Government
    - But, need more budget or find out other budget for conducting and developing the digital projects.

